HCD-GX470/GX570

SERVICE MANUAL

US Model
Canadian Model

Ver. 1.0 2006.03

Photo: HCD-GX470

- HCD-GX470 is the amplifier, CD player, tape deck and tuner section in MHC-GX470.
- HCD-GX570 is the amplifier, CD player, tape deck and tuner section in MHC-GX570.

CD Section	Model Name Using Similar Mechanism	HCD-GX555
	CD Mechanism Type	CDM74KF-K6BD83S
	Base Unit Name	BU-K6BD83S-WOD
	Optical Pick-up Block Name	KSM-213DCP
TAPE Section	Model Name Using Similar Mechanism	NEW
	Tape Transport Mechanism Type	CWN42FF609

SPECIFICATIONS

Main unit

AUDIO POWER SPECIFICATIONS
POWER OUTPUT AND TOTAL HARMONIC DISTORTION: (The United States model only)
With 6 ohm loads, both channels driven, from 120 – 10,000 Hz; rated 125 watts per channel minimum RMS power, with no more than 10% total harmonic distortion from 250 milliwatts to rated output.

Amplifier section

GX470

Front speaker
Continuous RMS power output (reference): 125 + 125 watts (6 ohms at 1 kHz, 10% THD)
Total harmonic distortion: less than 0.07% (6 ohms at 1 kHz, 80 W)

Subwoofer
Continuous RMS power output (reference): 150 watts (6 ohms at 80 Hz, 10% THD)
Total harmonic distortion: less than 0.07% (6 ohms at 80 Hz, 90 W)

GX570

Front speaker:
Continuous RMS power output (reference): 145 + 145 W (6 ohms at 1 kHz, 10% THD)
Total harmonic distortion: less than 0.07% (6 ohms at 1 kHz, 80 W)

Subwoofer:
Continuous RMS power output (reference): 170 W (6 ohms at 80 Hz, 10% THD)
Total harmonic distortion: less than 0.07% (6 ohms at 80 Hz, 90 W)

Inputs
AUDIO IN (stereo mini jack): voltage 250 mV, impedance 47 kilohms

Outputs
PHONES (stereo mini jack): accepts headphones of 8 ohms or more
SPEAKER: accepts impedance of 6 to 16 ohms
SUBWOOFER OUT: accepts impedance of 6 to 16 ohms

Inputs:
AUDIO IN (stereo mini jack): voltage 250 mV, impedance 47 kilohms

Outputs:
PHONES (stereo mini jack): accepts headphones of 8 ohms or more
SPEAKER: accepts impedance of 6 to 16 ohms
SUBWOOFER OUT: accepts impedance of 6 to 16 ohms

CD player section

System: Compact disc and digital audio system
Laser Diode Properties
Emission duration: continuous
Laser Output*: Less than 44.6µW
*This output is the value measurement at a distance of 200mm from the objective lens surface on the Optical Pick-up Block with 7mm aperture.
Frequency response: 20 Hz – 20 kHz
Signal-to-noise ratio: More than 90 dB
Dynamic range: More than 90 dB

Tape deck section

Recording system: 4-track 2-channel, stereo
Frequency response: 50 – 13,000 Hz (±3 dB), using Sony TYPE I cassettes

– Continued on next page –

COMPACT DISC DECK RECEIVER

9-887-123-01
2006C05-1
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Sony Corporation
Personal Audio Division
Published by Sony Techno Create Corporation

SONY

Tuner section

FM stereo, FM/AM superheterodyne tuner

FM tuner section:
Tuning range
87.5 – 108.0 MHz (100 kHz step)
Antenna: FM lead antenna
Antenna terminals: 75 ohms unbalanced
Intermediate frequency: 10.7 MHz
AM tuner section:
Tuning range
530 – 1,710 kHz (with 10 kHz tuning interval)
531 – 1,710 kHz (with 9 kHz tuning interval)
Antenna: AM loop antenna, external antenna terminal
Intermediate frequency: 450 kHz

General

Power requirements
AC 120 V, 60 Hz

Power consumption
USA model:
GX470: 240 watts
GX570: 270 watts
Canadian model:
GX470: 320 VA
GX570: 360 VA

Dimensions (w/h/d) (excl. speakers):
GX470: Approx. 280 × 328 × 412.3 mm
GX570: Approx. 280 × 348 × 412.3 mm

Mass (excl. speakers): Approx. 9.4 kg

Design and specifications are subject to change without notice.

Notes on chip component replacement

- Never reuse a disconnected chip component.
- Notice that the minus side of a tantalum capacitor may be damaged by heat.

Flexible Circuit Board Repairing

- Keep the temperature of the soldering iron around 270 °C during repairing.
- Do not touch the soldering iron on the same conductor of the circuit board (within 3 times).
- Be careful not to apply force on the conductor when soldering or unsoldering.

SAFETY CHECK-OUT

After correcting the original service problem, perform the following safety check before releasing the set to the customer:
Check the antenna terminals, metal trim, "metallized" knobs, screws, and all other exposed metal parts for AC leakage.
Check leakage as described below.

LEAKAGE TEST

The AC leakage from any exposed metal part to earth ground and from all exposed metal parts to any exposed metal part having a return to chassis, must not exceed 0.5 mA (500 microamperes.). Leakage current can be measured by any one of three methods.

1. A commercial leakage tester, such as the Simpson 229 or RCA WT-540A. Follow the manufacturers' instructions to use these instruments.
2. A battery-operated AC milliammeter. The Data Precision 245 digital multimeter is suitable for this job.
3. Measuring the voltage drop across a resistor by means of a VOM or battery-operated AC voltmeter. The "limit" indication is 0.75 V, so analog meters must have an accurate low-voltage scale. The Simpson 250 and Sanwa SH-63Trd are examples of a passive VOM that is suitable. Nearly all battery operated digital multimeters that have a 2 V AC range are suitable. (See Fig. A)

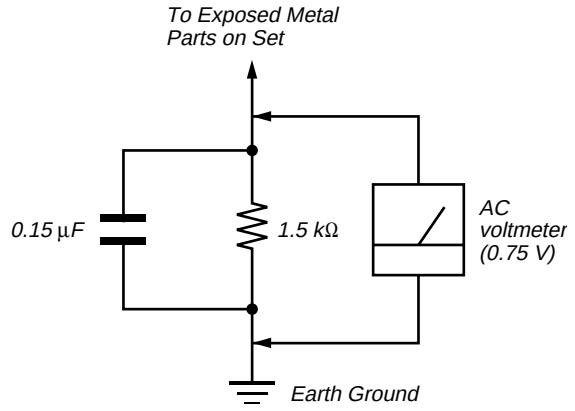

Fig. A. Using an AC voltmeter to check AC leakage.

SAFETY-RELATED COMPONENT WARNING!!

COMPONENTS IDENTIFIED BY MARK ⚠ OR DOTTED LINE WITH MARK ⚠ ON THE SCHEMATIC DIAGRAMS AND IN THE PARTS LIST ARE CRITICAL TO SAFE OPERATION. REPLACE THESE COMPONENTS WITH SONY PARTS WHOSE PART NUMBERS APPEAR AS SHOWN IN THIS MANUAL OR IN SUPPLEMENTS PUBLISHED BY SONY.

ATTENTION AU COMPOSANT AYANT RAPPORT À LA SÉCURITÉ!

LES COMPOSANTS IDENTIFIÉS PAR UNE MARQUE ⚠ SUR LES DIAGRAMMES SCHÉMATIQUES ET LA LISTE DES PIÈCES SONT CRITIQUES POUR LA SÉCURITÉ DE FONCTIONNEMENT. NE REMPLACER CES COM- POSANTS QUE PAR DES PIÈCES SONY DONT LES NUMÉROS SONT DONNÉS DANS CE MANUEL OU DANS LES SUPPLÉMENTS PUBLIÉS PAR SONY.

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SECTION 1
SERVICING NOTES

NOTES ON HANDLING THE OPTICAL PICK-UP BLOCK OR BASE UNIT

The laser diode in the optical pick-up block may suffer electrostatic break-down because of the potential difference generated by the charged electrostatic load, etc. on clothing and the human body.
During repair, pay attention to electrostatic break-down and also use the procedure in the printed matter which is included in the repair parts.
The flexible board is easily damaged and should be handled with care.

NOTES ON LASER DIODE EMISSION CHECK

The laser beam on this model is concentrated so as to be focused on the disc reflective surface by the objective lens in the optical pick-up block. Therefore, when checking the laser diode emission, observe from more than 30 cm away from the objective lens.

UNLEADED SOLDER

Boards requiring use of unleaded solder are printed with the lead-free mark (LF) indicating the solder contains no lead.
(Caution: Some printed circuit boards may not come printed with the lead free mark due to their particular size)

: LEAD FREE MARK

Unleaded solder has the following characteristics.

- Unleaded solder melts at a temperature about 40 °C higher than ordinary solder.
  Ordinary soldering irons can be used but the iron tip has to be applied to the solder joint for a slightly longer time.
  Soldering irons using a temperature regulator should be set to about 350 °C.
  Caution: The printed pattern (copper foil) may peel away if the heated tip is applied for too long, so be careful!
- Strong viscosity
  Unleaded solder is more viscou-s (sticky, less prone to flow) than ordinary solder so use caution not to let solder bridges occur such as on IC pins, etc.
- Usable with ordinary solder
  It is best to use only unleaded solder but unleaded solder may also be added to ordinary solder.

RELEASING THE ANTITHEFT LOCK

The disc table lock function for the antitheft of an demonstration disc in the store is equipped.

Releasing Procedure :

1. Press the I/⏻ button to turn the power on.
2. While pressing the □ button, press the ⏏ button until "UNLOCKED" displayed on the fluorescent indicator tube (around 5 seconds).

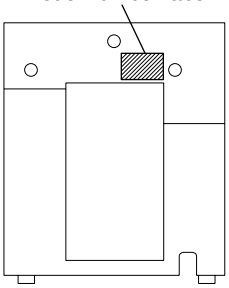
Note: When "LOCKED" is displayed, the antitheft lock is not released by turning power on/off with the I/⏻ button.

NOTES ON REPLACEMENT OF IC901 ON THE MAIN BOARD

IC901 on the MAIN board cannot exchange with single. When IC901 is damaged, exchange the entire mounted board.

MODEL IDENTIFICATION – Back Panel –

Model number label



Label indication	Model
2-664-530-0□	GX570: US
2-664-531-0□	GX570: Canadian
2-664-532-0□	GX470: US
2-664-533-0□	GX470: Canadian

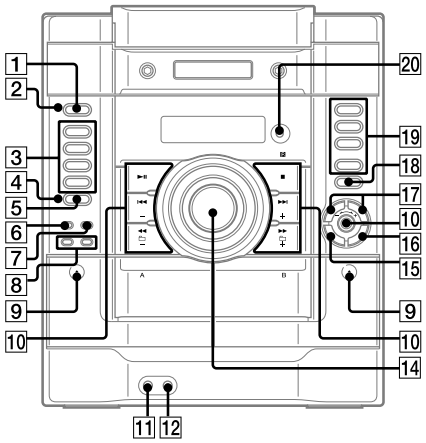
SECTION 2
GENERAL

This section is extracted from instruction manual.

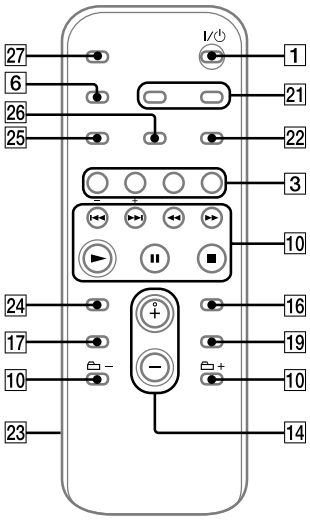
– GX470 –

Guide to parts and controls

Unit



Remote



This manual mainly explains operations using the remote, but the same operations can also be performed using the buttons on the unit having the same or similar names.

1 I/⏻ (power) button
Press to turn on the system.

2 STANDBY indicator
Lights up when the system is turned off.

3 CD button
Press to select the CD function.

TUNER/BAND button
Press to select the TUNER function. Press to select FM or AM reception mode.

Unit: TAPE A/B button
Remote: TAPE button
Press to select the TAPE function. Press to select TAPE A or TAPE B.

AUDIO IN button
Press to select the AUDIO IN function.

FUNCTION button
Press to select the function.

4 SUBWOOFER indicator
Lights up when the subwoofer is turned on.

5 SUBWOOFER button
Press to turn on and off the subwoofer.

6 DISPLAY button
Press to change the information on the display.

7 PLAY MODE/TUNING MODE button
Press to select the play mode of a CD, MP3 or tape. Press to select the tuning mode.

8 Buttons for synchro recording or manual recording
REC PAUSE/START button, CD SYNC button
Press to record on a tape.

9 PUSH ⏏ utton
Press to insert or eject a tape.

10 Playback buttons
Unit: ▷/❚❚ (play/pause) button
Remote: ► (play) button, ❚❚ (pause) button
Press to start or pause playback.

■ (stop) button
Press to stop playback.

I◄◄/►►I (go back/go forward) button
Press to select a track or file.

Unit: TUNING +/– button
Remote: +/– (tuning) button
Press to tune in the desired station.

🗀 +/– (select folder) button (page 11)
Press to select a folder on an MP3 disc.

◄◄/►► (rewind/fast forward) button
Press to find a point in a track or file.

MULTI JOG dial (I◄◄/►►I (go back/go forward), +/– (tuning))
Turn to select a track or file. Turn to tune in the desired station. (Same as the I◄◄/►►I, +/– buttons on the remote)

11 PHONES jack
Connect the headphones.

12 AUDIO IN jack
Connect to an audio component.

14 Unit: VOLUME control
Turn to adjust the volume.

Remote: VOLUME +/– button
Press to adjust the volume.

15 EQ BAND button
Press to select the frequency band.

16 ENTER button
Press to enter the settings.

17 Sound buttons
Unit: GROOVE button, SURROUND button
Remote: EQ button
Press to select the sound.

18 ⏏ (open/close) button
Press to insert and eject a disc.

19 DISC 1 – 3 button
Press to select a disc. Press to switch to the CD function from other function.

Unit: DISC SKIP/EX-CHANGE button
Press to select a disc. Press to exchange a disc while playing.
Remote: DISC SKIP button
Press to select a disc.

20 Remote sensor

21 CLOCK/TIMER SELECT button
CLOCK/TIMER SET button
Press to set the clock and the timers.

22 REPEAT/FM MODE button
Press to listen to a disc, a single track or file repeatedly. Press to select the FM reception mode (monaural or stereo).

23 Battery compartment lid

24 CLEAR button
Press to delete a pre-programmed track.

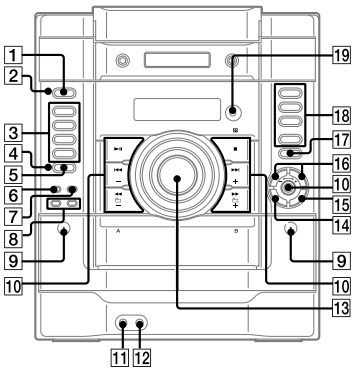
25 TUNER MEMORY button
Press to preset the radio station.

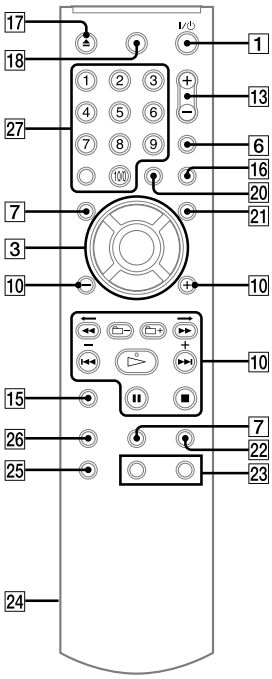
26 PLAY MODE/TUNING MODE button
Press to select the play mode of a CD, MP3 or tape.
Press to select the tuning mode.

27 SLEEP button
Press to set the Sleep Timer.

– GX570 –

Basic Operations

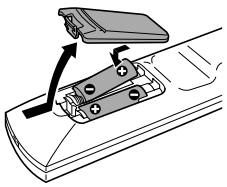




Before using the system

To use the remote

Slide and remove the battery compartment lid 24, and insert the two supplied R6 (size AA) batteries, ⊖ side first, matching the polarities shown below.



- With normal use, the batteries should last for about six months.
- Do not mix an old battery with a new one or mix different types of batteries.
- If you do not use the remote for a long period of time, remove the batteries to avoid damage from battery leakage and corrosion.

To receive the XM Satellite Radio

Introducing XM Satellite Radio

XM Radio is the satellite radio service with millions of listeners across the U.S. Broadcasting live daily. XM Radio offers 160 digital radio channels offering music, news, sports, comedy, talk, entertainment, traffic and weather reports, with high quality digital sound.

How to Subscribe

XM $12.95 monthly service subscription sold separately. XM Connect and Play (TM) antenna required to receive XM service (sold separately). Installation costs and other fees and taxes, including a one-time activation fee may apply. Subscription fee is consumer only. All fees and programming subject to change. Channels with frequent explicit language are indicated with an XL. Channel blocking is available for XM radio receivers by calling 1-800-XMRADIO. Subscriptions subject to Customer Agreement available at xmradio.com. XM service only available in the 48 contiguous United States. XM Ready and XM Connect-and-Play are trademarks of XM Satellite Radio Inc. (C)2006 XM Satellite Radio Inc. All rights reserved.

Activate XM Service

Find the 8-character XM Radio ID of the Connect-and-Play antenna. With the Connect-and-Play antenna connected to the unit, the Radio ID can be found by selecting channel 0 on the radio. Press >10, 10/0, 10/0, 10/0 on the remote in that order to select channel 0.
Record the Radio ID here for reference: _____.
(NOTE: The XM Radio ID does not use the letters I, O, S, or F.)
Activate your XM Satellite Radio service online at http://activate.xmradio.com or by calling 1-800-XMRADIO (1-800-967-2346). You will need a major credit card.
XM will send a signal from the satellites to activate the full channel lineup. Activation normally takes 10 to 15 minutes, but during peak busy periods, you may need to keep your player on for up to an hour. When you can access the full channel lineup on your player, you're done.

Notes on XM Satellite Radio

- To ensure optimal reception of XM's satellite signal, move your antenna to various window locations around your home to see where the best reception will be received. Most XM customers place the antenna in a south-facing window with a clear view to the sky.
- Residents in Canada please see information about XM Canada at the following webpage: (http://www.xmradio.ca/)

To set the clock

1 Turn on the system.

Press I/⏻ (power) 1.

2 Select the clock set mode.

Press CLOCK/TIMER SET 23 on the remote. If the current mode appears on the display, press ⏮/⏭ 10 repeatedly to select "CLOCK SET" and then press ENTER 15.

3 Set the time.

Press ⏮/⏭ 10 repeatedly to set the hour, and then press ENTER 15. Use the same procedure to set the minutes.

When you turn off the system after setting the clock, the clock display appears instead of the demonstration display.

The clock settings are lost when you disconnect the power cord or if a power failure occurs.

Selecting a music source

Press the following buttons (or press FUNCTION 3 on the remote repeatedly).

To select	Press
CD	CD 3.
Tuner	TUNER/BAND 3.
Tape (deck A or B)	TAPE on the remote (or TAPE A/B on the unit) 3.
Component (connected using an audio cord)	AUDIO IN 3 on the unit.

Adjusting the sound

To adjust the volume

Press VOLUME +/– on the remote (or turn the VOLUME control on the unit) 13.

To add a sound effect

To	Press
Reinforce the bass and create a more powerful sound	GROOVE 16 on the unit repeatedly until "GROOVE" appears.
Set the surround effect	SURROUND 16 on the unit repeatedly until "SURR" appears.
Select the preset sound effect	EQ 16 on the remote repeatedly. To cancel, press EQ 16 on the remote repeatedly until "EQ OFF" appears.

To turn on the subwoofer

Press SUBWOOFER 5 on the unit repeatedly until "SUB ON" appears. The SUBWOOFER indicator 4 on the unit lights up. If you later disconnect the subwoofer, repeat the procedure until "SUB OFF" appears. The volume of the subwoofer is linked to the front speakers.

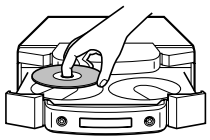
Playing a CD/MP3 disc

1 Select the CD function.

Press CD 3.

2 Place a disc.

Press OPEN/CLOSE ⏏ on the remote (or ⏏ (open/close) on the unit) 17, and place a disc with the label side up on the disc tray.



To insert additional discs, press DISC SKIP 18 to rotate the disc tray.

To close the disc tray, press OPEN/CLOSE ⏏ on the remote (or ⏏ (open/close) on the unit) 17 again.

Do not force the disc tray closed with your finger, as this may damage the unit.

3 Start playback.

Press ▶ (play) on the remote (or ▷II (play/pause) on the unit) 10.

To	Press
Pause playback	II (pause) on the remote (or ▷II (play/pause) on the unit) 10. To resume play, press the button again.
Stop playback	■ (stop) 10.
Select a folder on an MP3 disc	🗀 +/– (select folder) 10.
Select a track or file	⏮/⏭ (go back/go forward) (or turn the MULTI JOG dial on the unit) 10.
Find a point in a track or file	Hold down ◀◀/▶▶ (rewind/fast forward) 10 during playback, and release the button at the desired point.
Select Repeat Play	REPEAT 21 on the remote repeatedly until "REP" or "REP1" appears.
Select a disc	DISC SKIP (or DISC 1 – 3 on the unit) 18 in stop mode.
Switch to CD function from other function	DISC 1 – 3 18 on the unit (Automatic Source Selection).
Exchange other discs while playing	EX-CHANGE 18 on the unit.

To change the play mode

Press PLAY MODE 7 repeatedly while the player is stopped. You can select normal play ("ALL DISCS" for all discs or "1 DISC" for a disc or "🗀*" for all MP3 files in the folder on the disc), shuffle play ("ALL DISCS SHUF" or "1 DISC SHUF" or "🗀 SHUF*"), or program play ("PGM").

* When playing a CD-DA disc, 🗀 (SHUF) Play performs the same operation as 1 DISC (SHUF) Play.

To select a CD track using the number buttons

Press the number buttons 27 on the remote during normal play. For example, to enter 20, press >10, 2, 10/0, in that order.

Notes on Repeat Play

- All tracks or files on a disc are played repeatedly up to five times.
- You cannot select "REP" and "ALL DISCS SHUF" at the same time.
- "REP1" indicates that a single track or file is repeated until you stop it.

Notes on playing MP3 discs

- Do not save other types of files or unnecessary folders on a disc that has MP3 files.
- Folders that have no MP3 files are skipped.
- MP3 files are played back in the order that they are recorded onto the disc.
- The system can only play MP3 files that have a file extension of ".MP3."
- If there are files on the disc that have the ".MP3" file extension, but that are not MP3 files, the unit may produce noise or may malfunction.
- The maximum number of:
  - folders is 150 (including the root folder).
  - MP3 files is 255.
  - MP3 files and folders that can be contained on a single disc is 300.
  - folder levels (the tree structure of files) is 8.
- Compatibility with all MP3 encoding/writing software, recording device, and recording media cannot be guaranteed. Incompatible MP3 discs may produce noise or interrupted audio or may not play at all.

Notes on playing multisession discs

- If the disc begins with a CD-DA (or MP3) session, it is recognized as a CD-DA (or MP3) disc, and playback continues until another session is encountered.
- A disc with a mixed CD format is recognized as a CD-DA (audio) disc.

Listening to the radio

To listen to FM or AM

1 Select "FM" or "AM."

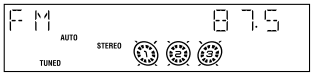
Press TUNER/BAND 3 repeatedly.

2 Select the tuning mode.

Press TUNING MODE 7 repeatedly until "AUTO" appears.

3 Tune in the desired station.

Press +/– on the remote (or TUNING +/– on the unit) 10. Scanning stops automatically when a station is tuned in, and then "TUNED" and "STEREO" (for stereo programs) appear.



To stop automatic scanning

Press ■ (stop) 10.

To tune in a station with a weak signal

If "TUNED" does not appear and the scanning does not stop, press TUNING MODE 7 repeatedly until "AUTO" and "PRESET" disappear, and then press +/– on the remote (or TUNING +/– on the unit) 10 repeatedly to tune in the desired station.

To reduce static noise on a weak FM stereo station

Press FM MODE 22 on the remote repeatedly until "MONO" appears to turn off stereo reception.

To listen to XM

You can operate and listen to the XM satellite Radio by connecting your XM Connect-and-Play Antenna. Before using the system, connect the XM Connect-and-Play antenna to the XM jack of the system (see "Hooking up the system securely").

1 Select "XM."

Press XM on the remote (or TUNER/BAND repeatedly) 3.

2 Select the All Channel mode.

Press TUNING MODE 7 repeatedly until "CAT" and "PRESET" disappear.

3 Tune in the desired channel.

Press +/– on the remote (or TUNING+/– on the unit) 10 repeatedly.

To select a channel by Category mode

1 Press XM on the remote (or TUNER/BAND repeatedly) 3.

2 Press TUNING MODE 7 repeatedly until "CAT" appears.

3 Press CATEGORY +/– 10 repeatedly.

4 Press +/– on the remote (or TUNING+/– on the unit) 10 repeatedly.

To select a channel using the number buttons

Press the number buttons 27 on the remote. For example, to enter 20, press >10, 10/0, 2, 10/0, in that order. You cannot enter 255 or more.

Notes

- If you select a channel that is not broadcasted, "OFF AIR" appears and the previous channel is selected.
- If you select a channel using the number buttons in Category mode, the tuning mode changes to All Channel mode automatically.

Playing a tape

1 Select a tape deck.

Press TAPE (or TAPE A/B on the unit) 3 repeatedly.

2 Insert a tape.

Press PUSH ⏏ 9 on the unit, and insert the TYPE I (normal) tape into the cassette holder with the side you want to play facing forward. Make sure there is no slack in the tape to avoid damaging the tape or the tape deck. Press PUSH ⏏ 9 on the unit again to close the cassette holder.

3 Start playback.

Press ► (play) on the remote (or ▷/▮▮ (play/pause) on the unit) 10. Do not eject the tape during playback or recording, as this may cause irreparable damage to the tape and the cassette holder.

To	Press
Pause playback	▮▮ (pause) on the remote (or ▷/▮▮ (play/pause) on the unit) 10. To resume play, press the button again.
Stop playback	■ (stop) 10.
Rewind or fast forward	◀◀/▶▶ (rewind/fast forward) 10.
Select Relay Play*	PLAY MODE 7 repeatedly until "RELAY" appears.

* After the playback of the front side of deck A, deck B plays the front side, and then stops.

Changing the display

To	Press
Change information on the display*	DISPLAY 6 repeatedly when the system is turned on.
Change Display mode (See below.)	DISPLAY 6 repeatedly when the system is turned off.

* For example, you can view CD/CD-G/MP3 disc information, such as the track or file number or folder name during normal play, or the total playing time while the player is stopped. You can also view XM radio information, such as the channel name, song title and artist name.

The system offers the following display modes.

Display mode	When the system is off[1],
Demonstration	The clock display is replaced by lighting and flashing of the display window.
Clock	The clock is displayed.
Power Saving Mode[2]	The display is turned off to conserve power. The timer and clock continue to operate.

[1] The STANDBY indicator 2 on the unit lights up when the system is off.

[2] When the system is in Power Saving Mode, the following functions are unavailable:

- setting the clock.
- changing the AM tuning interval.
- turning on the system by pressing the function buttons (for example, CD 3).
- changing the CD power manage function.
- resetting the system to factory settings.

Notes on the display information

- The following are not displayed;
  - total playing time for a CD-DA disc depending on the play mode.
  - total playing time for an MP3 disc.
  - remaining playing time for an MP3 file.
- The following are not displayed correctly;
  - elapsed playing time of an MP3 file encoded using a VBR (variable bit rate).
  - folder and file names that do not follow either the ISO9660 Level 1, Level 2 or Joliet in the expansion format.
- The following are displayed;
  - ID3 tag information for MP3 files when ID3 version 1 and version 2 tags are used.
  - up to 30 characters of ID3 tag information using uppercase letters (A to Z), numbers (0 to 9), and symbols (˜ $ % ' ( ) * , – . / < = > @ [\ ] _ ` { | } ! ? ^).

Using optional audio components

To connect an optional headphones

Connect headphones to the PHONES jack 11 on the unit.

To connect an optional component

Connect additional audio component to the AUDIO IN jack 12 on the unit using an audio analog cord (not supplied). Turn down the volume on the system, and then select the AUDIO IN function.

Other Operations

Creating your own CD program (Program Play)

Use buttons on the remote to create your own program.

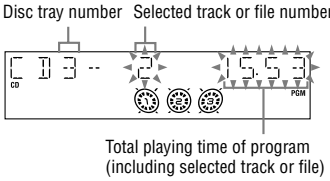
1 Press CD 3 to select the CD function.

2 Press PLAY MODE 7 repeatedly until "PGM" appears while the player is stopped.

3 Press DISC SKIP 18 repeatedly to select a disc.

4 Press I◄◄/►►I 10 repeatedly until the desired track number appears.

When programming MP3 files, press 🗀 +/– (select folder) 10 repeatedly to select the desired folder, and then select the desired file.



5 Press ENTER 15 to add the track or file to the program.

"– –.– –" appears when the total program time exceeds 100 minutes for a CD, or when you select an MP3 file.

6 Repeat steps 3 through 5 to program additional tracks or files, up to a total of 25 tracks or files.

7 To play your program of tracks or files, press ► (play) 10.

The program remains available until you open the disc tray. To play the same program again, press ► (play) 10.

To cancel Program Play

Press PLAY MODE 7 repeatedly until "PGM" disappears while the player is stopped.

To delete the last track or file of the program

Press CLEAR 20 while the player is stopped.

To view program information, such as total playing time and the number of tracks

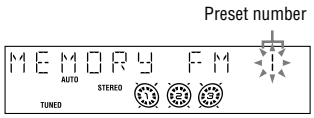
Press DISPLAY 6 repeatedly while the player is stopped.

Presetting radio stations

You can preset your favorite radio stations and tune them in instantly by selecting the corresponding preset number.
Use buttons on the remote to preset stations.

1 Tune in the desired station (see "Listening to the radio").

2 Press TUNER MEMORY 26.



Press +/– 10 repeatedly to select your desired preset number.

If another station is already assigned to the selected preset number, the station is replaced by the new stations.

4 Press ENTER 15.

5 Repeat steps 1 through 4 to store other stations.

You can preset up to 20 FM, 10 AM and 20 XM stations. The preset stations are retained for about half a day even if you disconnect the power cord or if a power failure occurs.

6 To call up a preset radio station, press TUNING MODE 7 repeatedly until "PRESET" appears, and then press +/– 10 repeatedly to select the desired preset number.

Note on presetting XM stations

You cannot preset XM stations except when you receive the station.

Recording onto a tape

You can record on a TYPE I (normal) tape in two ways:

CD Synchro Recording:

You can record an entire CD onto a tape. The recording level is adjusted automatically.

Manual Recording:

You can record just the portions you like from a sound source, including connected audio components.

Use buttons on the unit to control tape recording.

1 Load a recordable tape into deck B with the side you want to record facing forward, and then press TAPE A/B 3 repeatedly to select TAPE B.

2 Prepare the recording source.

For CD Synchro Recording:

Press CD 3 to select the CD function. Load the disc you want to record, and press DISC SKIP repeatedly to select the disc.

When recording a folder from an MP3 disc, press PLAY MODE 7 repeatedly to select "🗀" and then press 🗀 +/– (select folder) 10 repeatedly to select the desired folder.

To record only your favorite CD tracks or MP3 files in your desired order, perform steps 2 to 6 of "Creating your own CD program."

For Manual Recording:

Select the desired source to record.

3 Set deck B to stand by for recording.

For CD Synchro Recording:

Press CD SYNC 8.

For Manual Recording:

Press REC PAUSE/START 8.

4 Start recording.

While recording, you cannot listen to other sources.

For CD Synchro Recording:

Press REC PAUSE/START 8. When the recording is completed, the CD player and the tape deck stop automatically.

For Manual Recording:

Press REC PAUSE/START 8, and then start playing the desired recording source.

If there is noise while recording from the tuner, reposition the appropriate antenna to reduce the noise.

To stop recording

Press ■ (stop) 10.

Notes

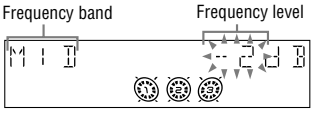
- Recording stops if you change to a different function.
- When loud sound signals are input, the system automatically adjusts the recording level to prevent distortion of the recorded sound signal (Auto Level Control function).
- You cannot eject the disc during CD Synchro Recording.

Creating your own sound effect

You can raise or lower the levels of specific frequency ranges, and then store the setting as "USER" in the memory.

1 Select the audio emphasis you want for your basic sound using EQ on the remote, and SURROUND and GROOVE on the unit 16.

2 Press EQ BAND 14 on the unit repeatedly to select a frequency band, and then turn the MULTI JOG dial 10 on the unit to adjust the frequency level. Repeat this for each band you want to adjust.



3 Hold down EQ 16 on the remote until "COMPLETE" appears.

The setting is stored in the memory.

4 To call up the personal sound effect, press EQ 16 on the remote repeatedly until "USER" appears.

To cancel the sound effect

Press EQ 16 on the remote repeatedly until "EQ OFF" appears.

Using the Timers

The system offers three timer functions. You cannot activate both the Play Timer and the Rec Timer at the same time. If you use either with the Sleep Timer, the Sleep Timer has priority.

Sleep Timer:

You can fall asleep to music. This function works even if the clock is not set.
Press SLEEP 25 repeatedly. If you select "AUTO," the system automatically turns off after the current disc or tape stops or in 100 minutes.
Do not select "AUTO" during Synchro Recording of a tape.

Play Timer:

You can wake up to CD, tape or tuner at a preset time.

Rec Timer:

You can record a preset radio station at a specified time.

Use buttons on the remote to control the Play Timer and the Rec Timer. Make sure you have set the clock.

1 Prepare the sound source.

For Play Timer:

Prepare the sound source, and then press VOLUME +/– 13 to adjust the volume.

To start from a specific CD track or MP3 file, create your own program.

For Rec Timer:

Tune in the preset radio station.

2 Press CLOCK/TIMER SET 23.

3 Press I◄◄/►►I 10 repeatedly to select "PLAY SET" or "REC SET," and then press ENTER 15.

"ON" appears, and the hour indication flashes.

4 Set the time to start playing or recording.

Press I◄◄/►►I 10 repeatedly to set the hour, and then press ENTER 15.

The minute indication flashes. Use the procedure above to set the minutes.

5 Use the same procedure as in step 4 to set the time to stop playing or recording.

6 Select the sound source or prepare the tape.

For Play Timer:

Press I◄◄/►►I 10 repeatedly until the desired sound source appears, and then press ENTER 15. The display shows the timer settings.

For Rec Timer:

Load a recordable tape into deck B. The display shows the timer settings.

7 Press I/⏻ (power) 1 to turn off the system.

The system turns on 15 seconds before the preset time. If the system is on at the preset time, the Play Timer and the Rec Timer will not play or record.

To activate or check the timer again

Press CLOCK/TIMER SELECT 23, press I◄◄/►►I 10 repeatedly until "PLAY SELECT" or "REC SELECT" appears, and then press ENTER 15.

To cancel the timer

Repeat the same procedure as above until "TIMER OFF" appears, and then press ENTER 15.

To change the setting

Start over from step 1.

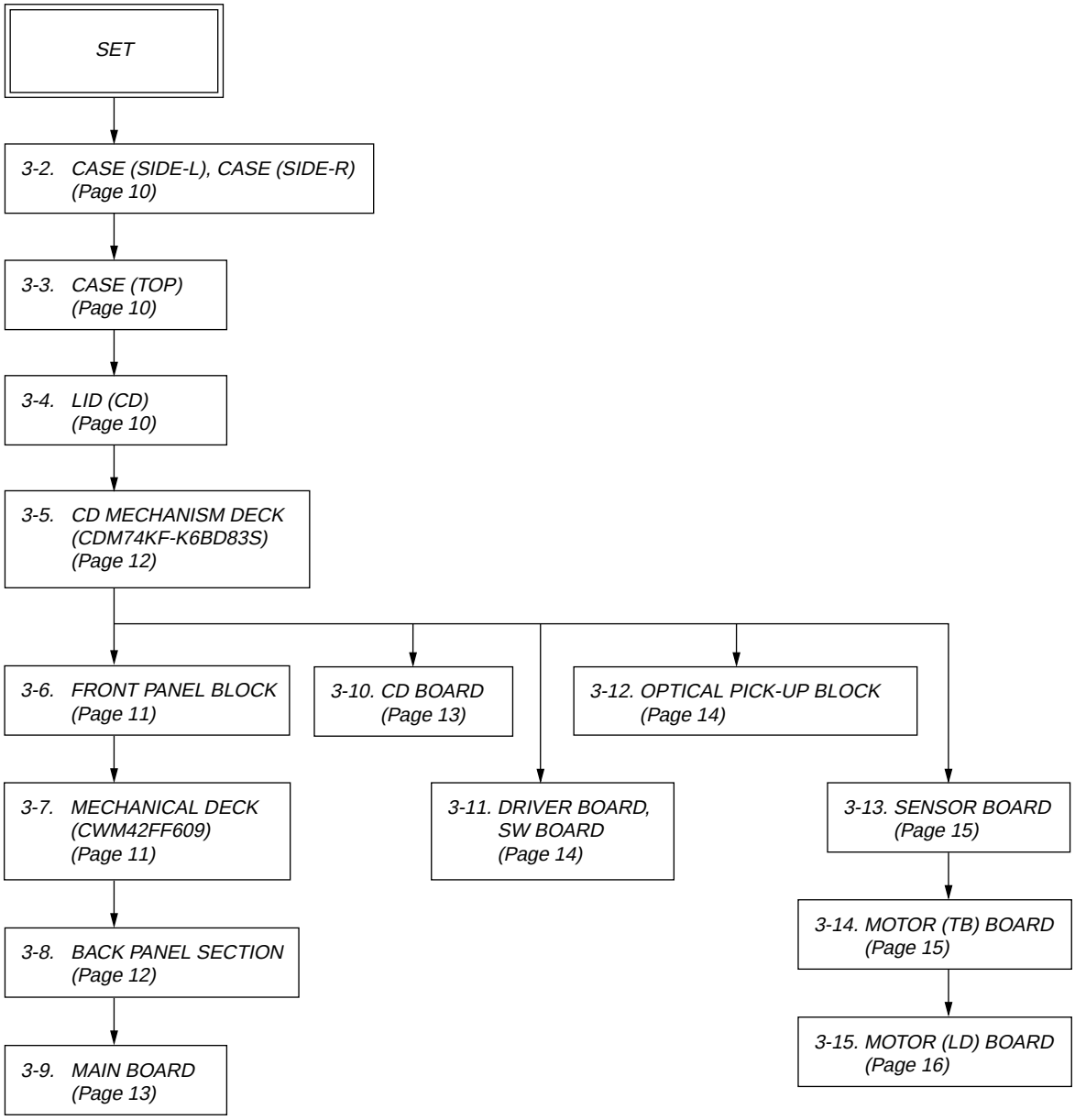
Tips

- The Play Timer setting remains as long as the setting is not canceled manually.
- The volume is reduced to minimum during the Rec Timer.
- The Rec Timer is canceled automatically after the Rec Timer has been activated.

SECTION 3
DISASSEMBLY

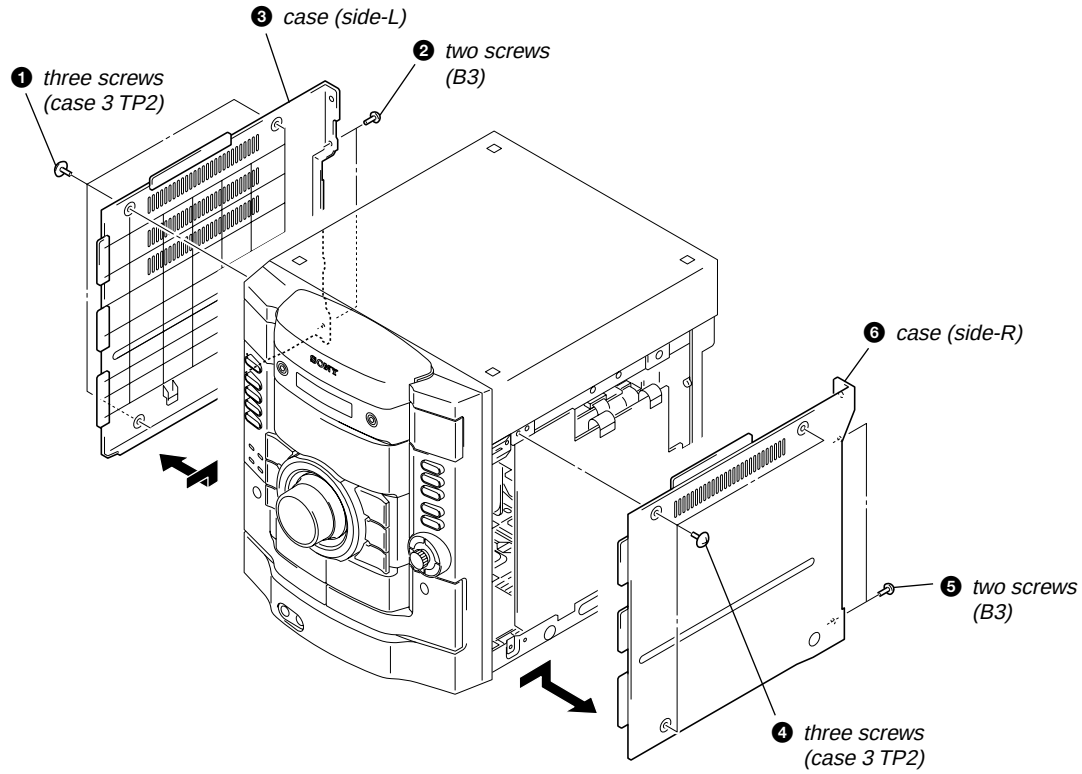
- This set can be disassembled in the order shown below.

3-1. DISASSEMBLY FLOW

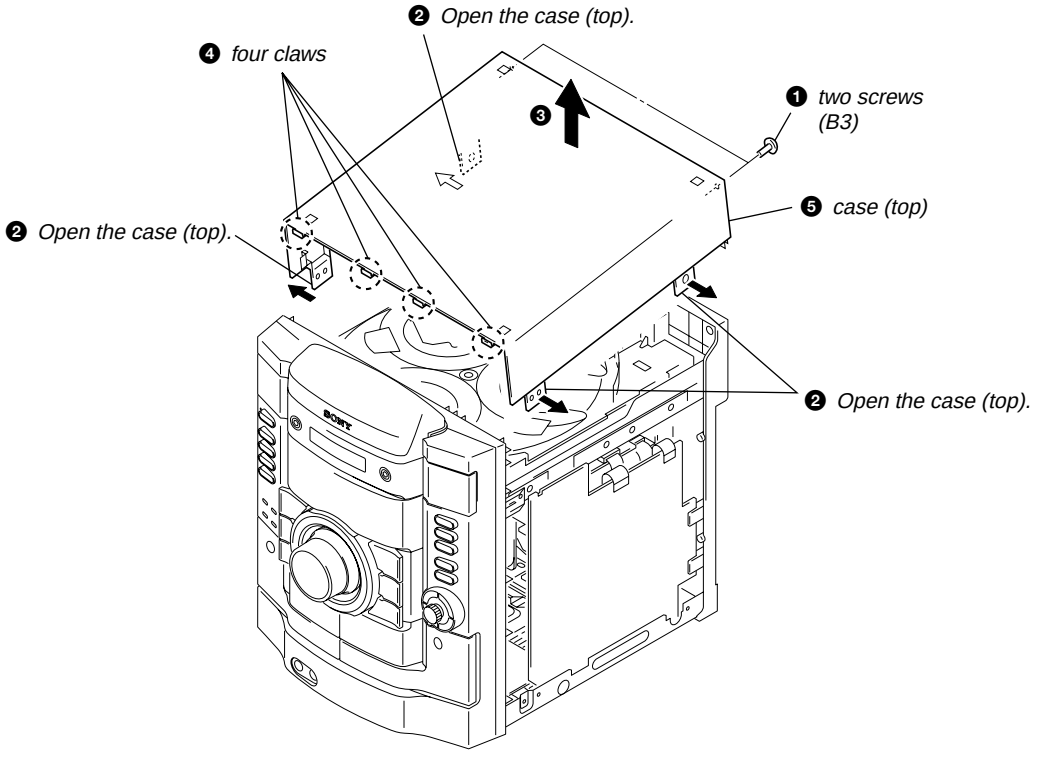

SET
3-2. CASE (SIDE-L), CASE (SIDE-R) (Page 10)
3-3. CASE (TOP) (Page 10)
3-4. LID (CD) (Page 10)
3-5. CD MECHANISM DECK (CDM74KF-K6BD83S) (Page 12)
3-6. FRONT PANEL BLOCK (Page 11)
3-10. CD BOARD (Page 13)
3-12. OPTICAL PICK-UP BLOCK (Page 14)
3-7. MECHANICAL DECK (CWM42FF609) (Page 11)
3-11. DRIVER BOARD, SW BOARD (Page 14)
3-13. SENSOR BOARD (Page 15)
3-8. BACK PANEL SECTION (Page 12)
3-14. MOTOR (TB) BOARD (Page 15)
3-9. MAIN BOARD (Page 13)
3-15. MOTOR (LD) BOARD (Page 16)

Note: Follow the disassembly procedure in the numerical order given.

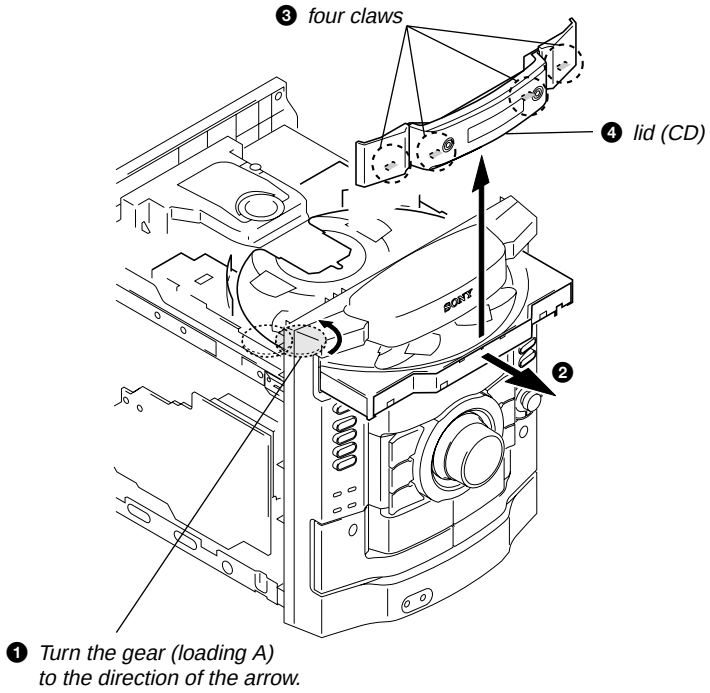
3-2. CASE (SIDE-L), CASE (SIDE-R)



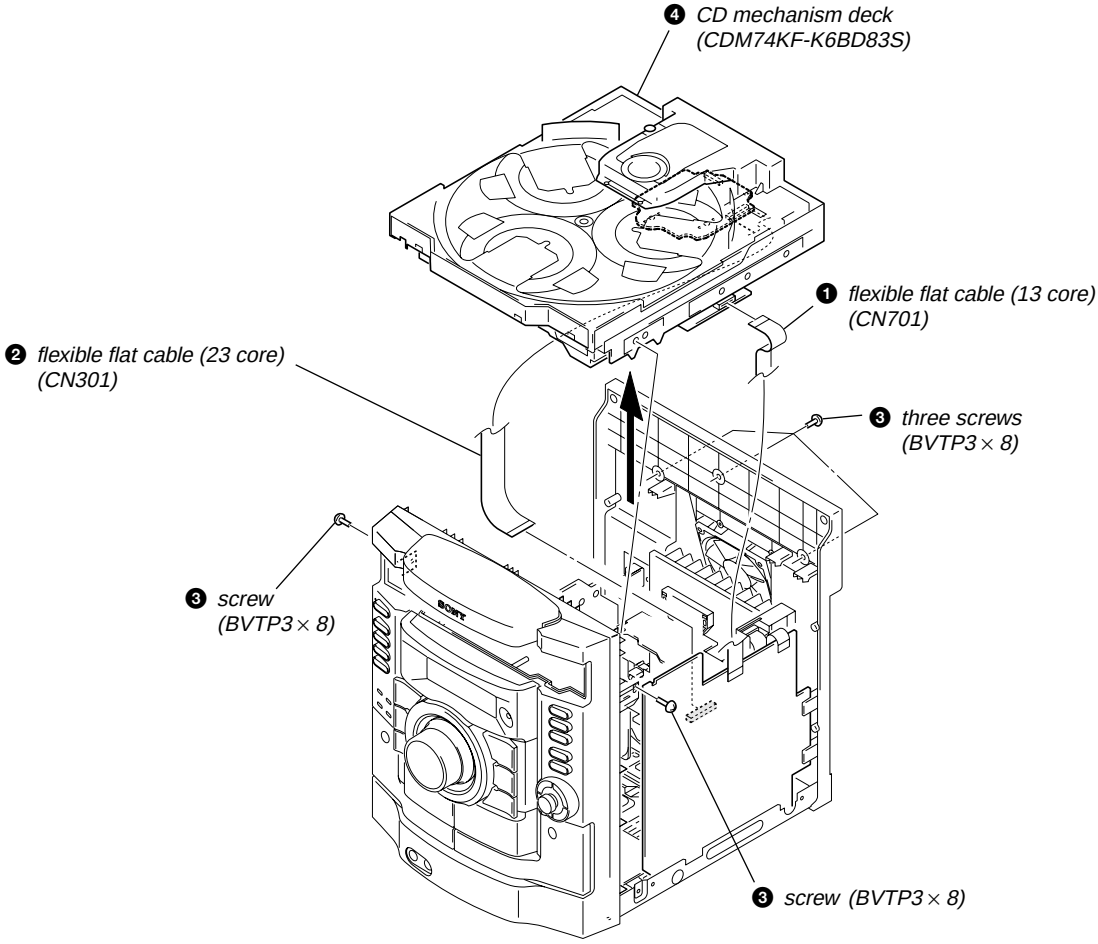
3-3. CASE (TOP)



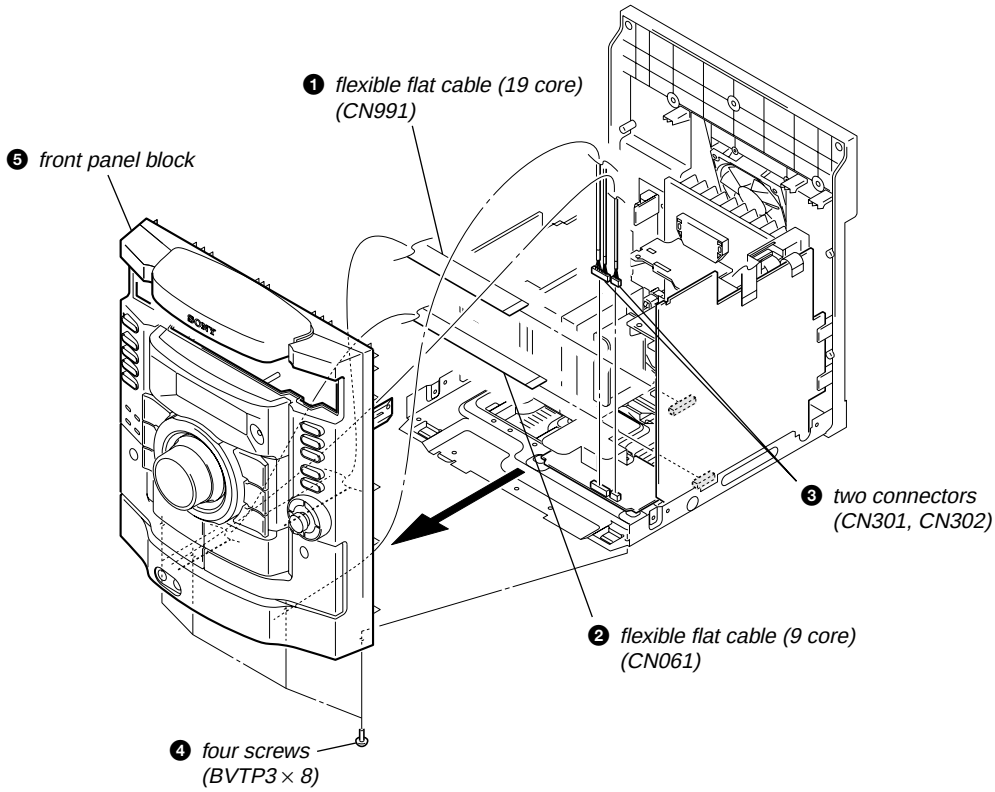
3-4. LID (CD)



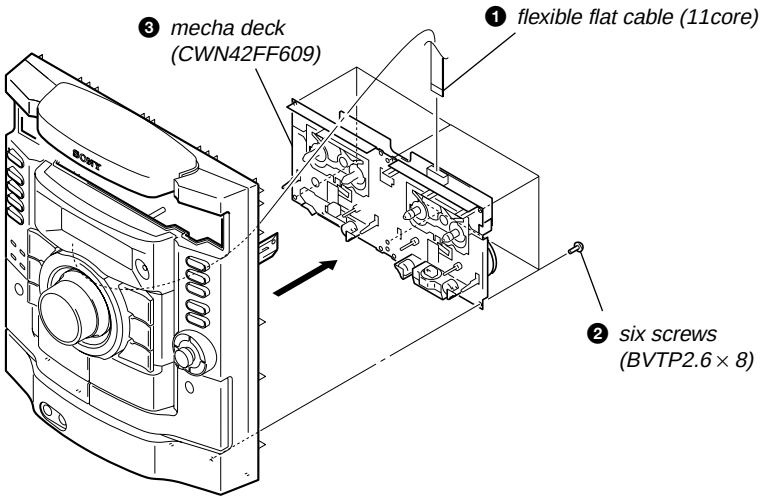
3-5. CD MECHANISM DECK (CDM74KF-K6BD83S)



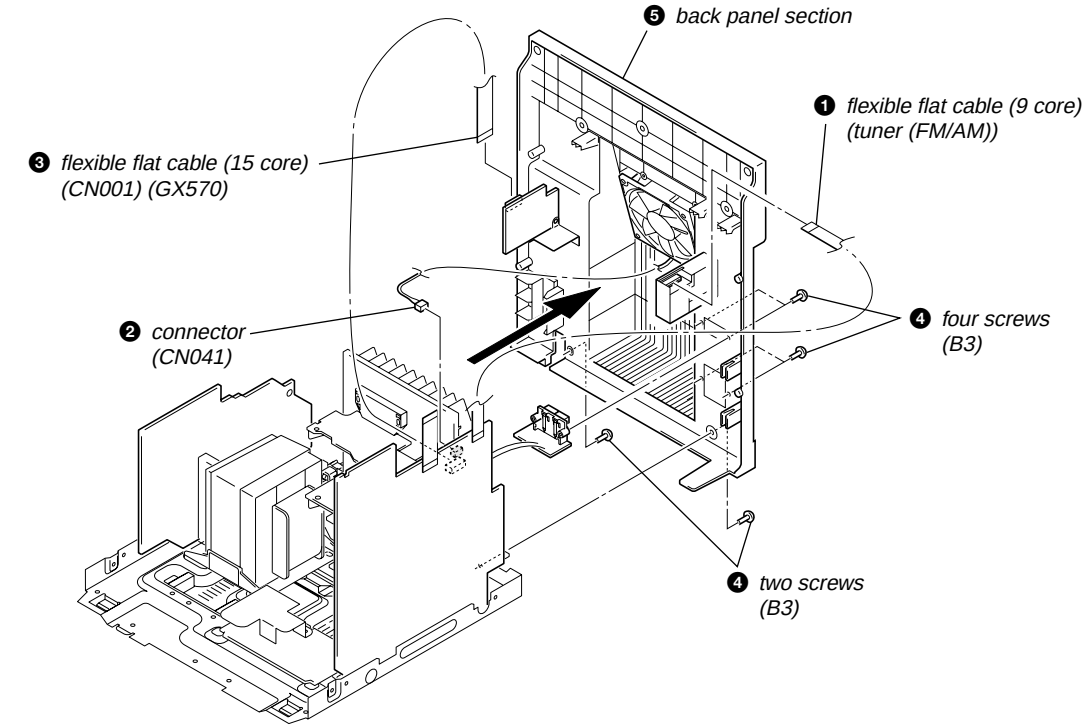
3-6. FRONT PANEL BLOCK



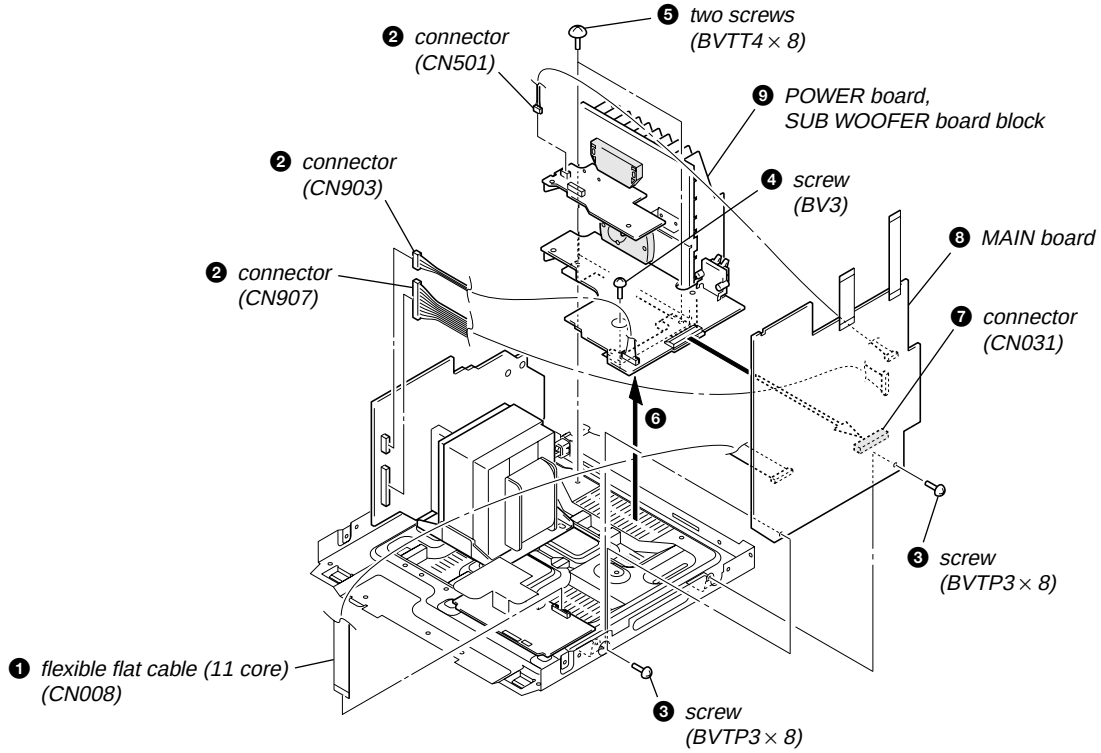
3-7. MECHA DECK (CWN42FF609)



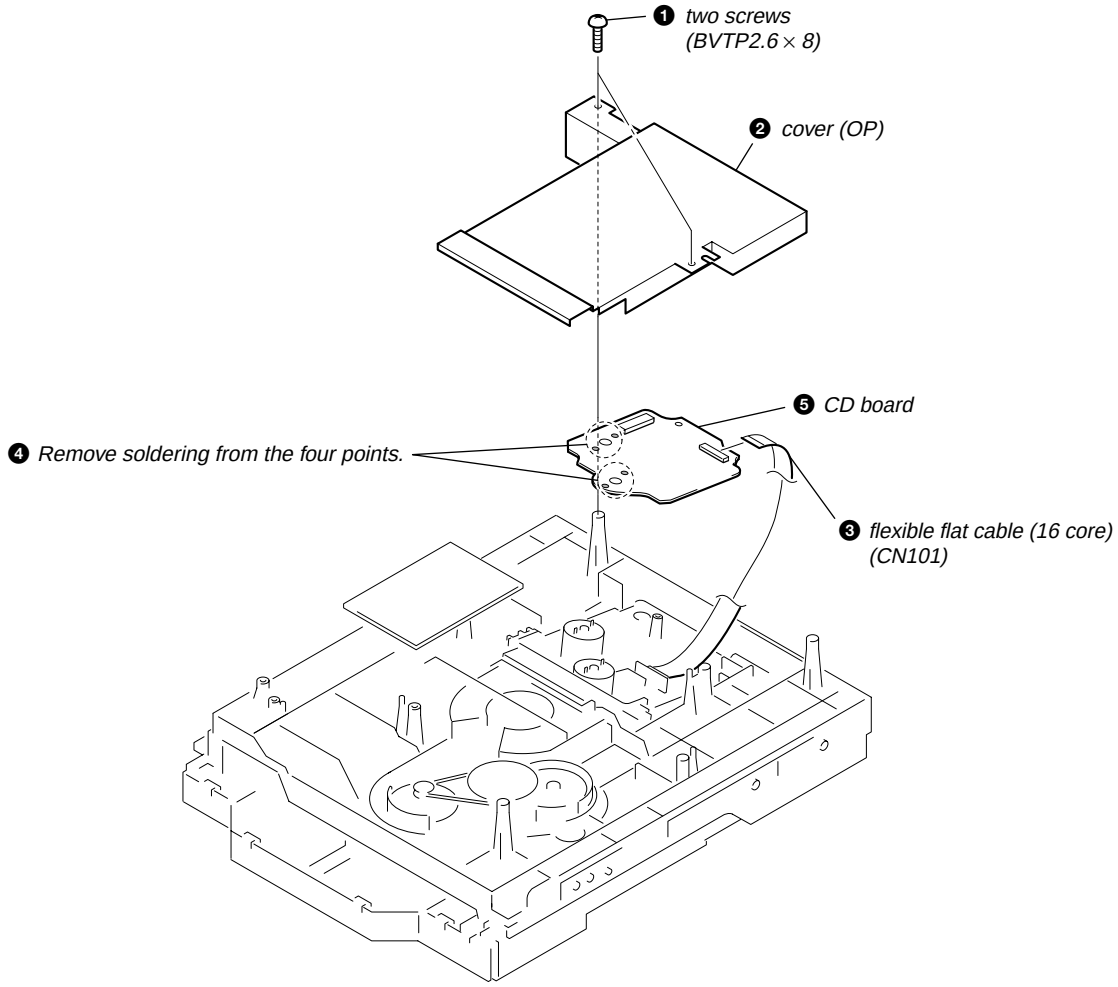
3-8. BACK PANEL SECTION



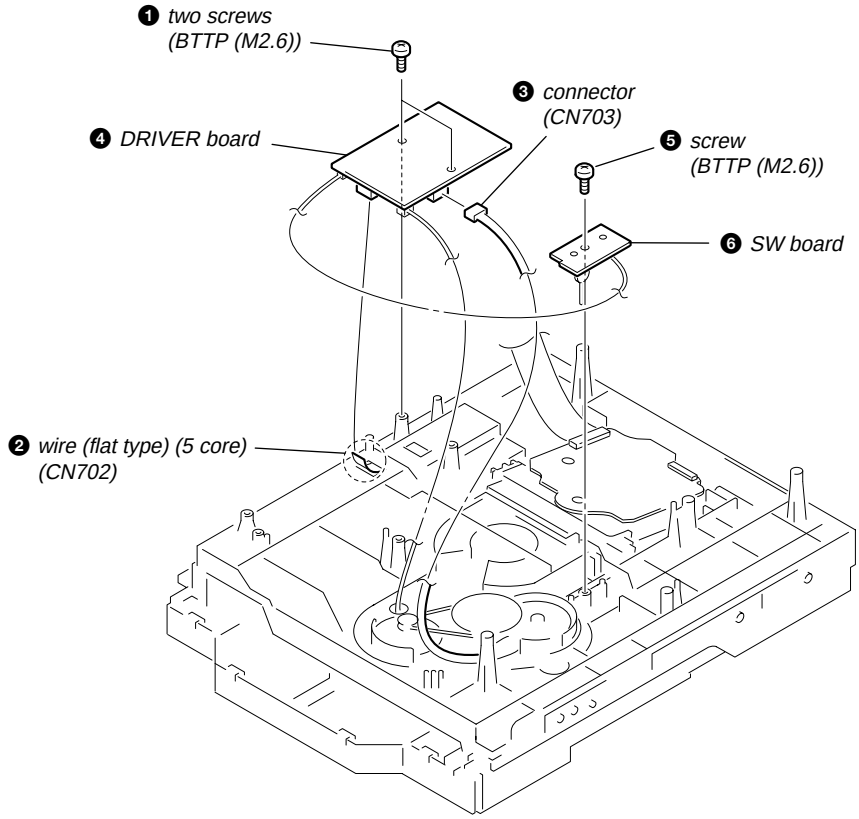
3-9. MAIN BOARD



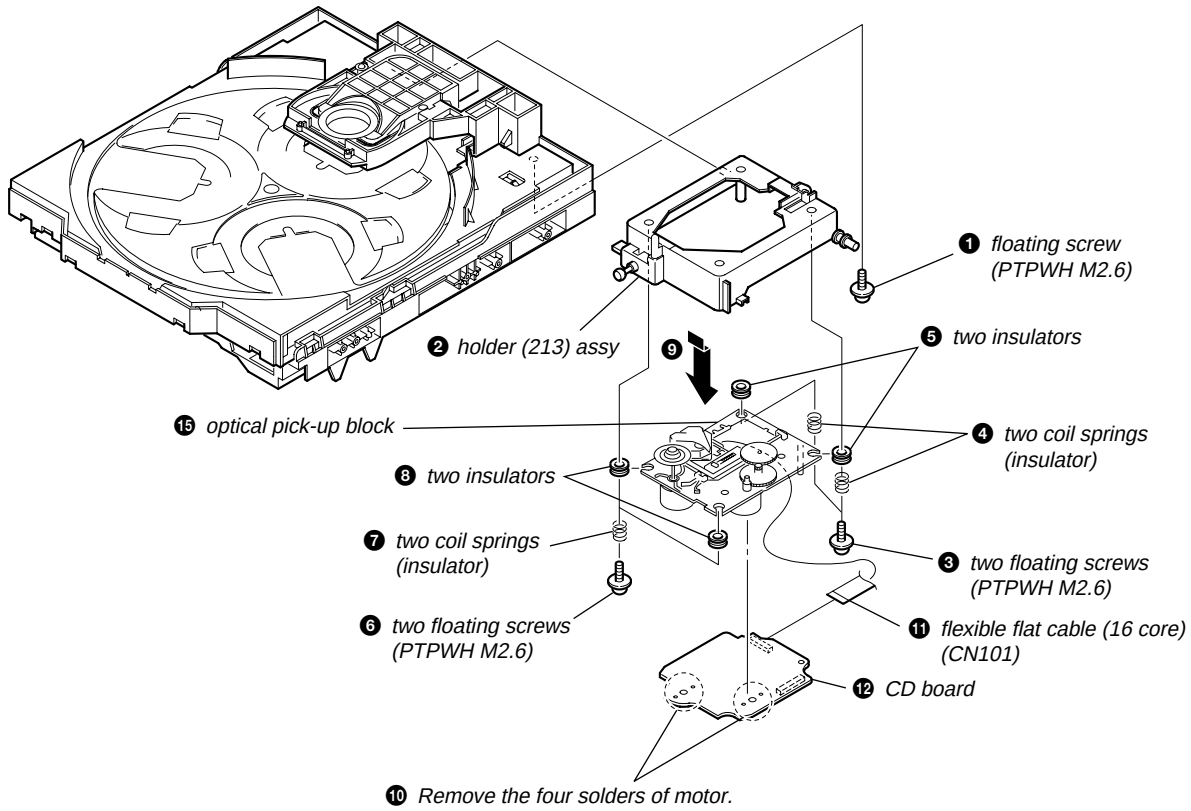
3-10. CD BOARD



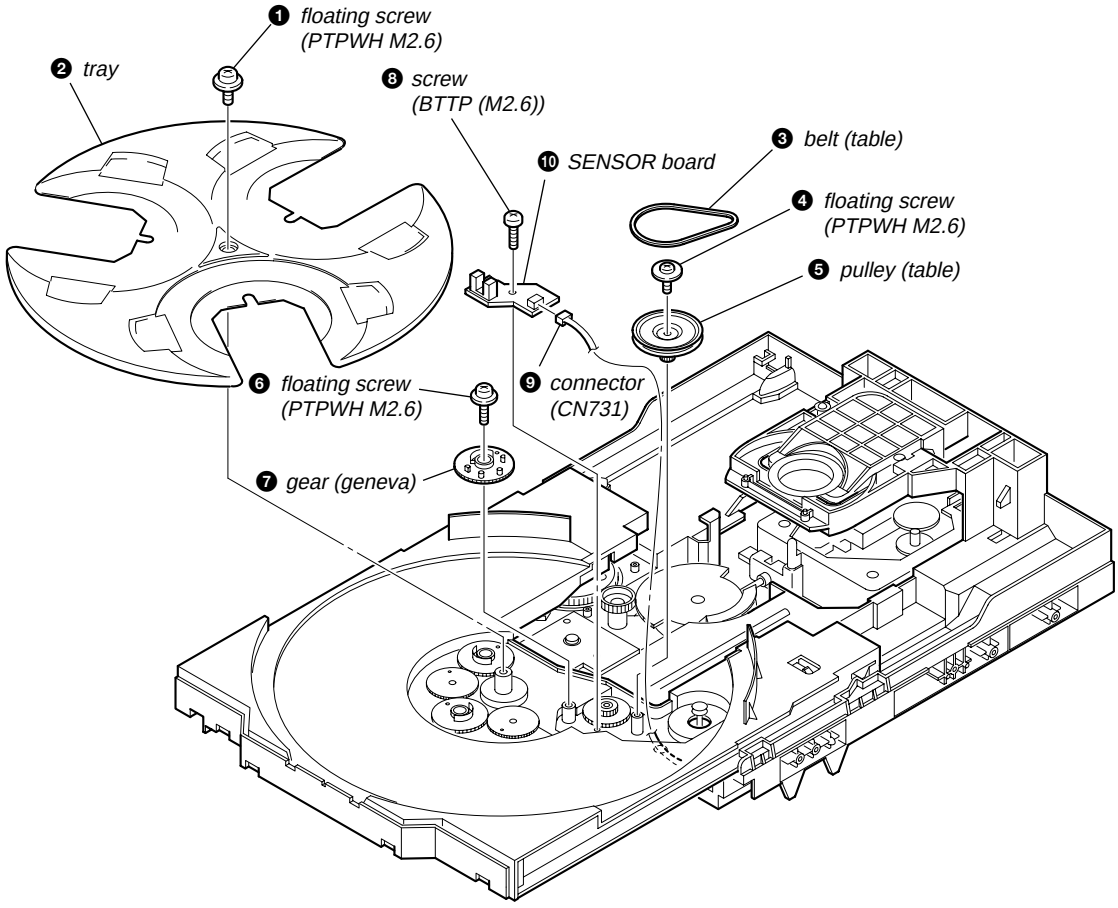
3-11. DRIVE BOARD, SW BOARD



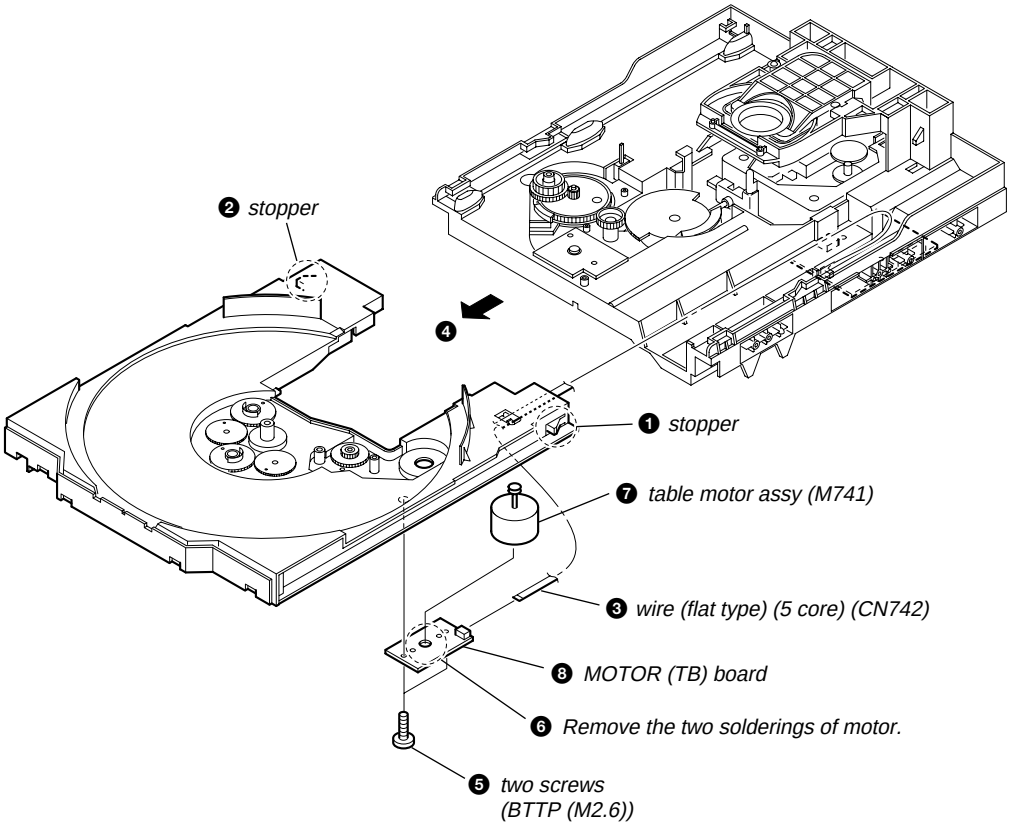
3-12. OPTICAL PICK-UP BLOCK


❶ floating screw (PTPWH M2.6)
❷ holder (213) assy
❾
❺ two insulators
⓯ optical pick-up block
❹ two coil springs (insulator)
❽ two insulators
❼ two coil springs (insulator)
❸ two floating screws (PTPWH M2.6)
❻ two floating screws (PTPWH M2.6)
⓫ flexible flat cable (16 core) (CN101)
⓬ CD board
❿ Remove the four solders of motor.

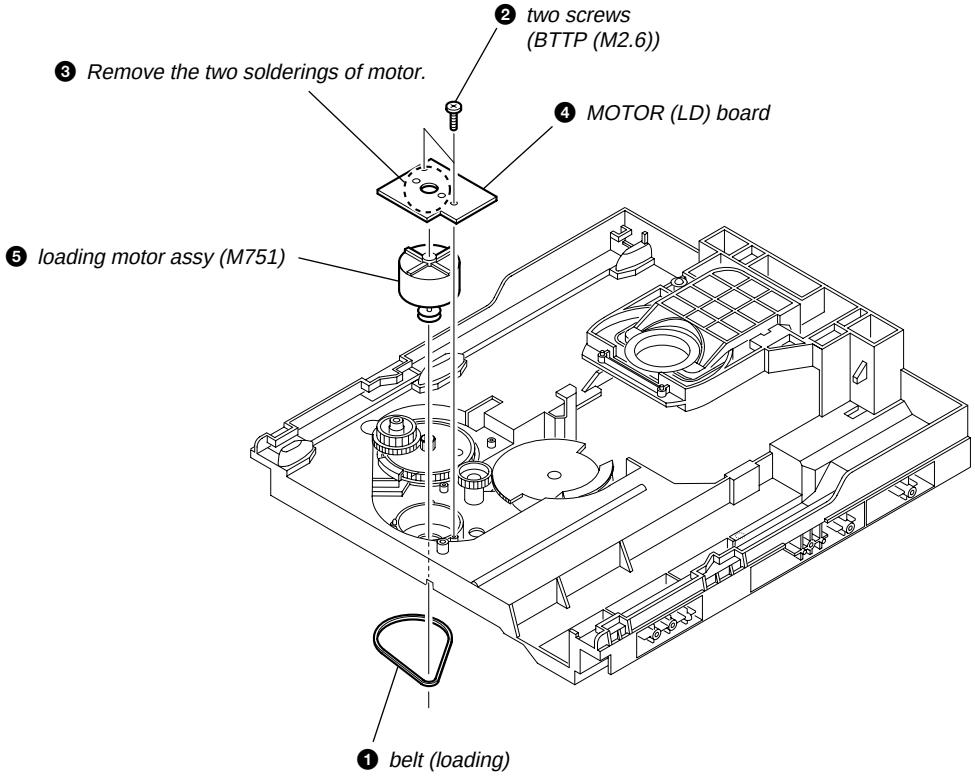
3-13. SENSOR BOARD



3-14. MOTOR (TB) BOARD



3-15. MOTOR (LD) BOARD



SECTION 4
TEST MODE

COLD RESET

The cold reset clears all data including preset data stored in the RAM to initial conditions. Execute this mode when returning the set to the customer.

Procedure:

1. Press three buttons of □ ,▷II and DISC 1 simultaneously.
2. The message "COLD RESET" is displayed on the fluorescent indicator tube momentarily, then becomes standby states.

TUNING STEP CHANGE-OVER

A step of AM tuning interval can be changed over between 9 kHz and 10 kHz.

Procedure:

1. Press the I/⏻ button to turn the power on.
2. Press the TUNER/BAND button to select "AM".
3. Press the I/⏻ button to turn the power off.
4. Press two buttons of TUNING – and I/⏻ simultaneously.
5. The message "AM 9K STEP" or "AM 10K STEP" is displayed on the fluorescent indicator tube, and thus the tuning interval is changed over.

CD SHIP (LOCK) MODE

This mode moves the optical pick-up to the position durable to vibration. Use this mode when returning the set to the customer after repair.

Procedure:

1. Press the I/⏻ button to turn the power on.
2. Press the CD button to select "CD".
3. Press two buttons of ▷II and POWER simultaneously.
4. The message "LOCK" is displayed on the fluorescent indicator tube, and the CD ship mode is set.

CD SHIP (LOCK) MODE & COLD RESET

This mode is used to perform CD ship (lock) mode and cold reset simultaneously.

Procedure:

1. Press the I/⏻ button to turn the power on.
2. Press the CD button to select "CD".
3. Press three buttons of □ , CD and ⏏ simultaneously.
4. The message "COLD RESET" is displayed on the fluorescent indicator tube momentarily, then becomes standby states.

ANTITHEFT LOCK MODE

This mode is used to unable to take sample disc out of disc table in the shop.

Procedure:

1. Press the I/⏻ button to turn the power on.
2. Press the CD button to select "CD".
3. Press two buttons of □ and ⏏ for 5 seconds.
4. The message "LOCKED" is displayed on the fluorescent indicator tube and the disc table is locked. (Even if pressing the ⏏ button, the message "LOCKED" is displayed on the fluorescent indicator tube and the disc table is locked)
5. To release this mode, press two buttons of □ and ⏏ for 5 seconds.
6. The message "UNLOCKED" is displayed on the fluorescent indicator tube and the disc table is unlocked.

AMP TEST MODE (GX470 ONLY)

This mode is used to display the parameter of amplifier IC and display the VACS status.

Procedure:

1. Press the I/⏻ button to turn the power on.
2. Press three buttons of □ , ▷II and ⏏ simultaneously.
3. When the AMP test mode is activated, the message "AMP TEST IN" is displayed on the fluorescent indicator tube momentarily, then amplifier adjustment mode is displayed on the fluorescent indicator tube.
4. Press the REC PAUSE/START button to changed over between VACS status display mode and the amplifier IC parameter display mode.
5. In this mode, press the ENTER button to changed over DBFB on/off, and "DBFB ON" or "DBFB OFF" is displayed on the fluorescent indicator tube.
6. In this mode, press the SURROUND button to changed over surround on/off, and "SURROUND ON" or "SURROUND OFF" is displayed on the fluorescent indicator tube.
7. In this mode, press the EQ BAND button to enter the equalizer adjustment mode.
   In the equalizer adjustment mode, press the EQ BAND button to change over the adjustment band as LOW/MID/HIGH. And turn the multi jog knob to adjust the equalizer level of each bands.
8. To release the amplifier IC parameter display mode or equalizer adjustment mode, press the I/⏻ button to the power off.

MC TEST MODE (GX470 ONLY)

This mode is used to check operations of microprocessor.

Procedure:

1. Press the I/⏻ button to turn the power on.
2. Press three buttons of □ , ▷II and DISC 3 simultaneously.
3. When the MC test mode is activated, VACS level is displayed on the fluorescent indicator tube momentarily.
4. Turn the multi jog knob clockwise, the message "ALL EQ MAX" is displayed on the fluorescent indicator tube momentarily and turn the multi jog knob counter-clockwise, the message "ALL EQ MIN" is displayed on the fluorescent indicator tube momentarily.
5. Press the ENTER button, the message "ALL EQ FLAT" is displayed on the fluorescent indicator tube momentarily.
6. Turn the VOLUME knob clockwise, the message "VOLUME MAX" is displayed on the fluorescent indicator tube momentarily and turn the VOLUME knob counterclockwise, the message "VOLUME MIN" is displayed on the fluorescent indicator tube momentarily.
7. Press the REC PAUSE/START button to changed over VACS on/off.
8. Press the I/⏻ button to release from this mode, then cold reset is performed.

VERSION DISPLAY MODE

This mode is used to check the model, destination and software version.

Procedure:

1. Press the [I/⏻] button to turn the power on.
2. Press three buttons of [□] ,[▷II] and [DISC 2] simultaneously.
3. Fluorescent indicator tube, and LEDs are all turned on.
4. Press the [REC PAUSE/START] button to display the software version and year, month, day of the software creation.
5. Press the [CD SYNC] button to display the model and destination.
6. To release this mode, press three buttons of [□], [▷II] and [DISC 2] simultaneously.

CD ERROR CODE DISPLAY MODE (GX470 ONLY)

This mode can be used for error code display of CD section.

Procedure:

1. Press the [I/⏻] button to turn the power on.
2. Press the [CD] button to select "CD".
3. Press three buttons of [□] , [CD] and [DISC 1] simultaneously.
4. When this mode is activated, mechanism deck error code is displayed on the fluorescent indicator tube.
5. Press the [REC PAUSE/START] button to changed over between optical pick-up error code display mode and mechanism deck error code mode.
6. Turn the multi jog knob to change over display of error history.
7. To release this mode, press the [I/⏻] button to turn the power off.

1. Mechanism Deck Error Code Mode

When this mode is entered, mechanism deck error code is displayed with the 10-character format on the fluorescent indicator tube.

The first digit from the left indicates:

The first digit from the left indicates which mode the error history is. In the mechanism deck error code mode, "M" is displayed on the fluorescent indicator tube.

The second digit from the left indicates:

(Error history number display)

The second digit from the left indicates which order the error history is. "1" indicates the latest error history, and each time the number increases by one, the error history goes back to one-previous error.

The third and 4th digit from the left indicates:
(Error status display)

The third and 4th digit from the left indicates which error status is indicated.

Display	Status
0 0	No error
0 8	Table operation time-out (Table does not move to the target position within the specified time)
1 6	In the chucking down operation, the operation was retried by the maximum number of times but the operation could not be completed
1 7	In the chucking up and down operation, the reverse recovery processing was attempted but it could not be recovered
1 8	In the chucking up operation, the operation was retried by the maximum number of times but the operation could not be completed
2 0	Loading operation time-out (Table does not move to the target position within the specified time)
2 2	As the chuck was in the ex-open status at the initialization, the closing was attempted but could not be completed

The 5th and 6th digit from the left indicates:
(Present status display)

The 5th and 6th digit from the left indicates which operating status when an error occurred is indicated.

Display	Status
0 1	Open completion status
0 2	From open status, the movement to chucking down position is under way
0 3	From chucking down position, the open operation is under way
0 4	Chucking down completion status
1 0	The chucking down operation is under way
1 1	The chucking up operation is under way
1 2	Close completion status
1 3	From close status, the ex-open operation is under way
1 4	From ex-open status, the close operation is under way
1 8	Ex-pen completion status

The 7th and 8th digit from the left indicates:
(Motor status display)

The 7th and 8th digit from the left indicates which motor output status when an error occurred is indicated.

Display	Status
× 0	No table motor output
× 1	Table motor forward output
× 2	Table motor backward output
× 3	Table motor break output
0 ×	No loading motor output
1 ×	Loading motor forward output
2 ×	Loading motor backward output
3 ×	Loading motor break output

The 9th and 10 th digit from the left indicates:
(Tray status display)

The 9th and 10th digit from the left indicates which target processing when an error occurred is indicated.

Display	Status
0 1	Open operation
1 2	Close operation
1 8	Ex-open operation

2. Optical Pick-up Error Code Mode

When this mode is entered, optical pick-up error code is displayed with the 8-character format on the fluorescent indicator tube.

The first digit from the left indicates:

The first digit from the left indicates which mode the error history is. In the optical pick-up error code mode, "D" is displayed on the fluorescent indicator tube.

The second digit from the left indicates:
(Error history No. display)

The second digit from the left indicates which order the error history is. "1" indicates the latest error history, and each time the number increases by one, the error history goes back to one-previous error.

The third and 4th digit from the left indicates:
(Error status display)

The third and 4th digit from the left indicates which error status is indicated.

Display	Status
0 1	Not focused (TOC read without a disc)
0 2	GFS NG (TOC read with a disc chucked)
0 3	Start operation time-over
0 4	Defocused continuously (Defocused during TOC reading)
0 5	Q code not entered for specified time
0 6	Tracking not turned ON
0 7	Blank disc (Blank disc TOC read)

The 5th and 6th digit from the left indicates:
(Error step display)

The 5th and 6th digit from the left indicates which processing when a trouble occurred

Display	Contents
0 1	Power OFF in progress
0 2	Initialize in progress
0 3	Oscillation stopping
0 4	From oscillation stop, oscillation starting
0 5	Stopping
0 6	Stop operation is under way
0 7	Start operation in progress
0 8	TOC read in progress
0 9	Search operation is under way
0 A	Playback operation is under way
0 B	Pause operation is under way
0 C	Playback manual search operation is under way
0 D	Pause manual search operation is under way
0 E	—

The 7th and 8th digit from the left indicates:

The 7th and 8th digit from the left indicates which operation in progress when a trouble occurred. (Step of each processing of the 5th and 6th digits is indicated)

5 REPEAT LIMIT CANCEL MODE

Number of repeat for CD playback is 5 times when the repeat mode is "REPEAT". This mode is used to enables CD to repeat playback for limitless times.

Procedure:

1. Press the I/⏻ button to turn the power on.
2. Press the CD button to select "CD".
3. Press three buttons of □ , CD and ▷II simultaneously.
4. The message "LIMIT OFF" is displayed on the fluorescent indicator tube momentarily, CD repeat 5 limit is cancelled.

CD POWER MANAGE

This mode is used to changed over CD power on/off for decreasing of reception noise in the tuner mode.

Procedure:

1. Press the I/⏻ button to turn the power on.
2. Press the CD button to select "CD".
3. Press the I/⏻ button to turn the power off.
4. Press two buttons of □ and I/⏻ simultaneously.
5. The message "CD POWER ON" or "CD POWER OFF" is displayed on the fluorescent indicator tube, and CD power on/off changed over in the tuner mode.

SECTION 5
MECHANICAL ADJUSTMENTS

PRECAUTION

1. Clean the following parts with a denatured-alcohol-moistened swab :

record/playback head	pinch roller
erase head	rubber belts
capstan	idlers

2. Demagnetize the record/playback head with a head demagnetizer. (Do not bring the head magnetizer close to the erase head.)
3. Do not use a magnetized screwdriver for the adjustments.
4. After the adjustments, appiy suitable locking compound to the parts adjusted.
5. The adjustments should be performed with the rated power supply voltage unless otherwise noted.

TORQUE MEASUREMENT

Mode	Torque Meter	Meter Reading
FWD	CQ-102C	2.6 – 6.9 mN·m (30 – 70 g·cm) (0.41 – 0.97 oz·inch)
FWD Back Tension	CQ-102C	0.15 – 0.59 mN·m (1.5 – 6.0 g·cm) (0.021 – 0.083 oz·inch)
FF/REW	CQ-201B	5.4 – 16.7 mN·m 55 – 170 g·cm) 0.76 – 2.35 oz·inch)

TAPE TENSION MEASUREMENT

Mode	Tension Meter	Meter Reading
FWD	CQ-403A	more than 100 g (more than 3.53 oz)

SECTION 6
ELECTRICAL ADJUSTMENTS

DECK SECTION | 0 dB=0.775 V

1. Demagnetize the record/playback head with a head demagnetizer.
2. Do not use a magnetized screwdriver for the adjustments.
3. After the adjustments, apply suitable locking compound to the parts adjust.

TEST TAPE

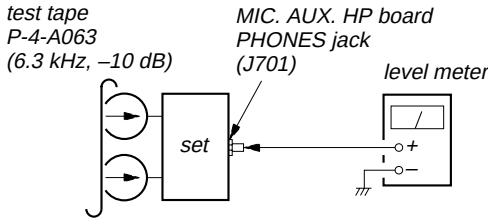
Tape	Signal	Used for
P-4-A063	6.3 kHz, -10 dB	Azimuth Adjustment

RECORD/PLAYBACK HEAD AZIMUTH ADJUSTMENT

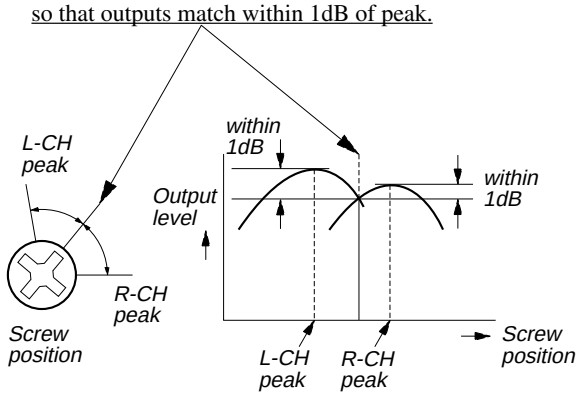
Note 1: Remove the mecha deck before this adjustment.
(Refer to Section 3. DISASSEMBLY (See page 9))
Note 2: Perform this adjustment for both decks.

Procedure:

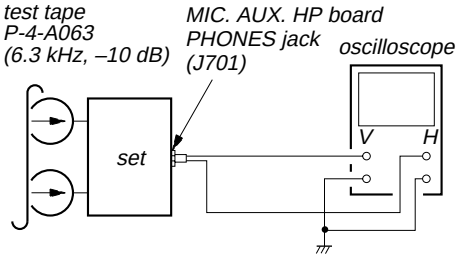
1. Mode: Playback

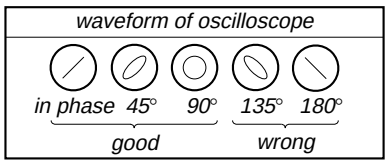


2. Turn the adjustment screw and check output peaks. If the peaks do not match for L-CH and R-CH, turn the adjustment screw so that outputs match within 1dB of peak.



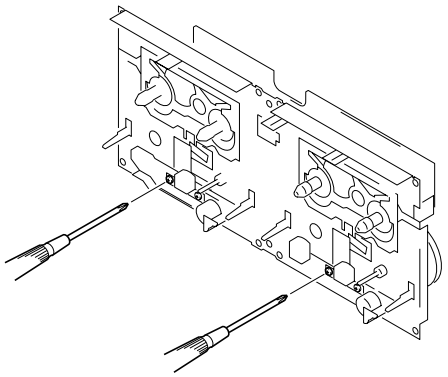
3. Mode: Playback





4. After the adjustments, apply suitable locking compound to the pats adjusted.

Adjustment Location: Playback Head (DECK-A)
Record/Playback/Erase Head (DECK-A)

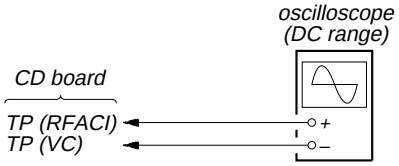


CD SECTION

Note:

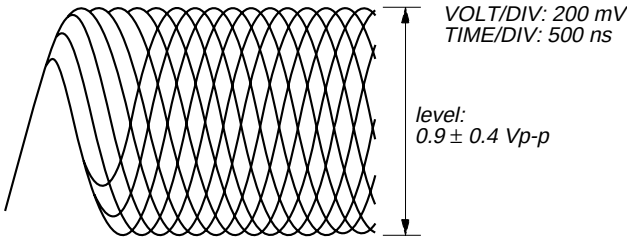
1. CD Block is basically constructed to operate without adjustment.
2. Use YEDS-18 disc (3-702-101-01) unless otherwise indicated.
3. Use an oscilloscope with more than 10 MΩ impedance.
4. Clean the object lens by an applicator with neutral detergent when the signal level is low than specified value with the following checks.
5. Check the focus bias check when optical pick-up block is replaced.

FOCUS BIAS CHECK

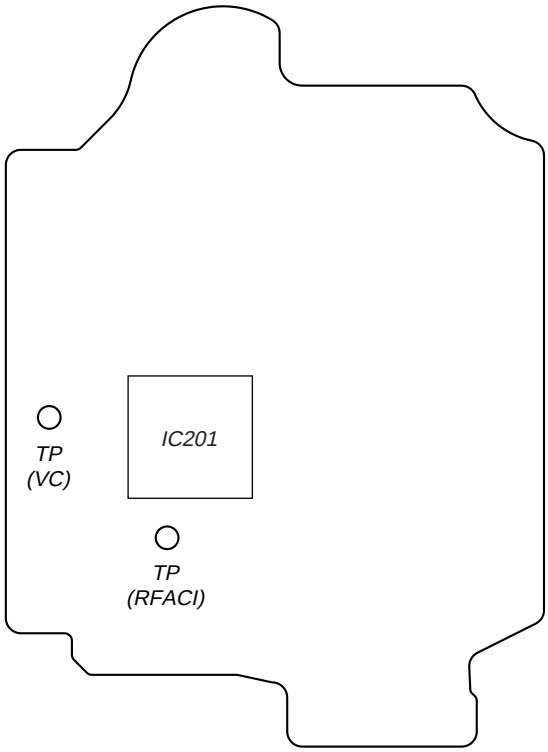


Procedure :

1. Connect oscilloscope to TP (RFACI) and TP (VC) on the CD board.
2. Press the I/⏻ button to turn the power on, and press the ⏏ button to open the CD disc table.
3. Set disc (YEDS-18) on the tray and press the ▷II button to playback.
4. Confirm that oscilloscope waveform is as shown in the figure below. (eye pattern)
   A good eye pattern means that the diamond shape (◊) in the center of the waveform can be clearly distinguished.

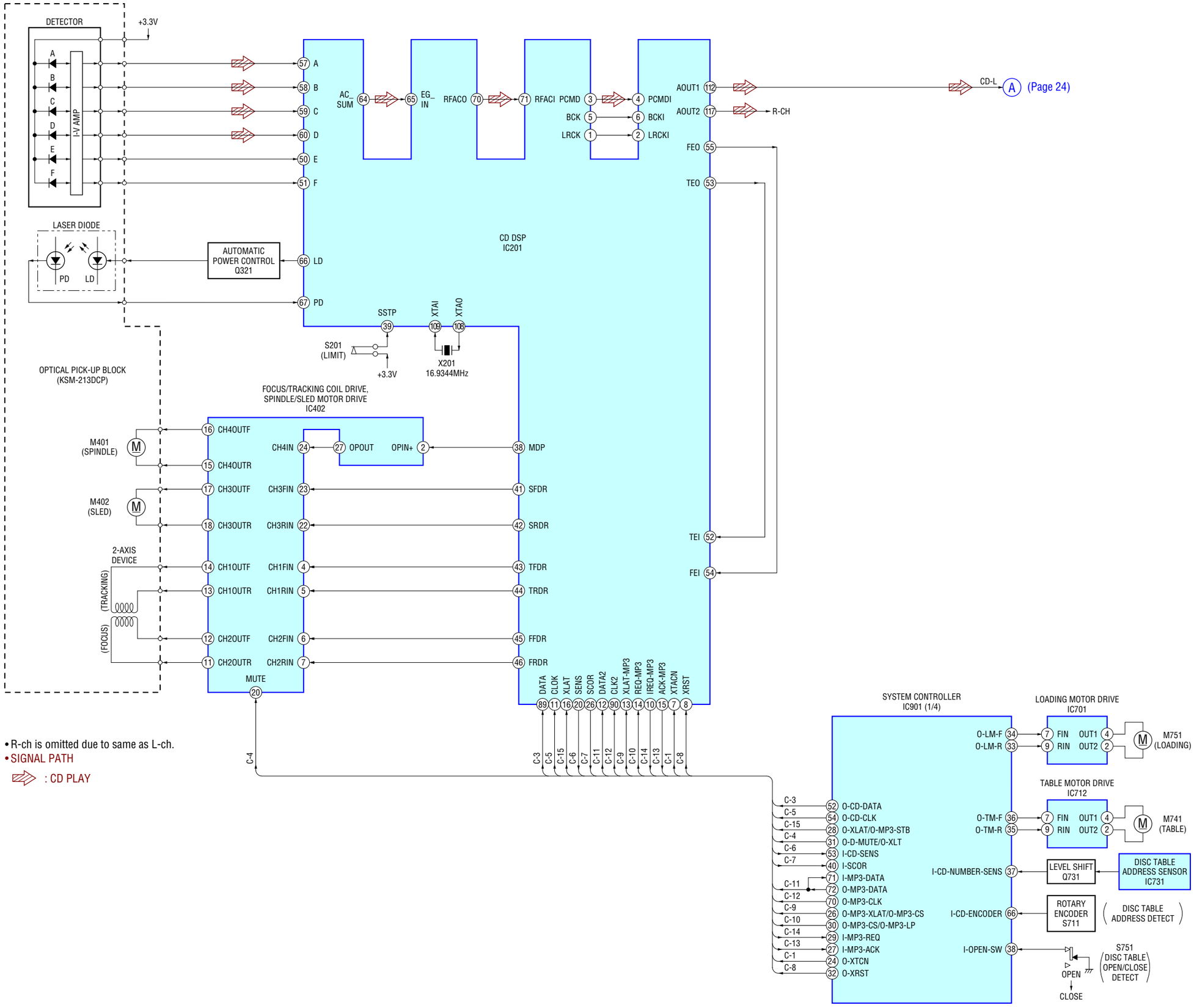


Connecting Location:
– CD Board (Conductor Side) –



SECTION 7
DIAGRAMS

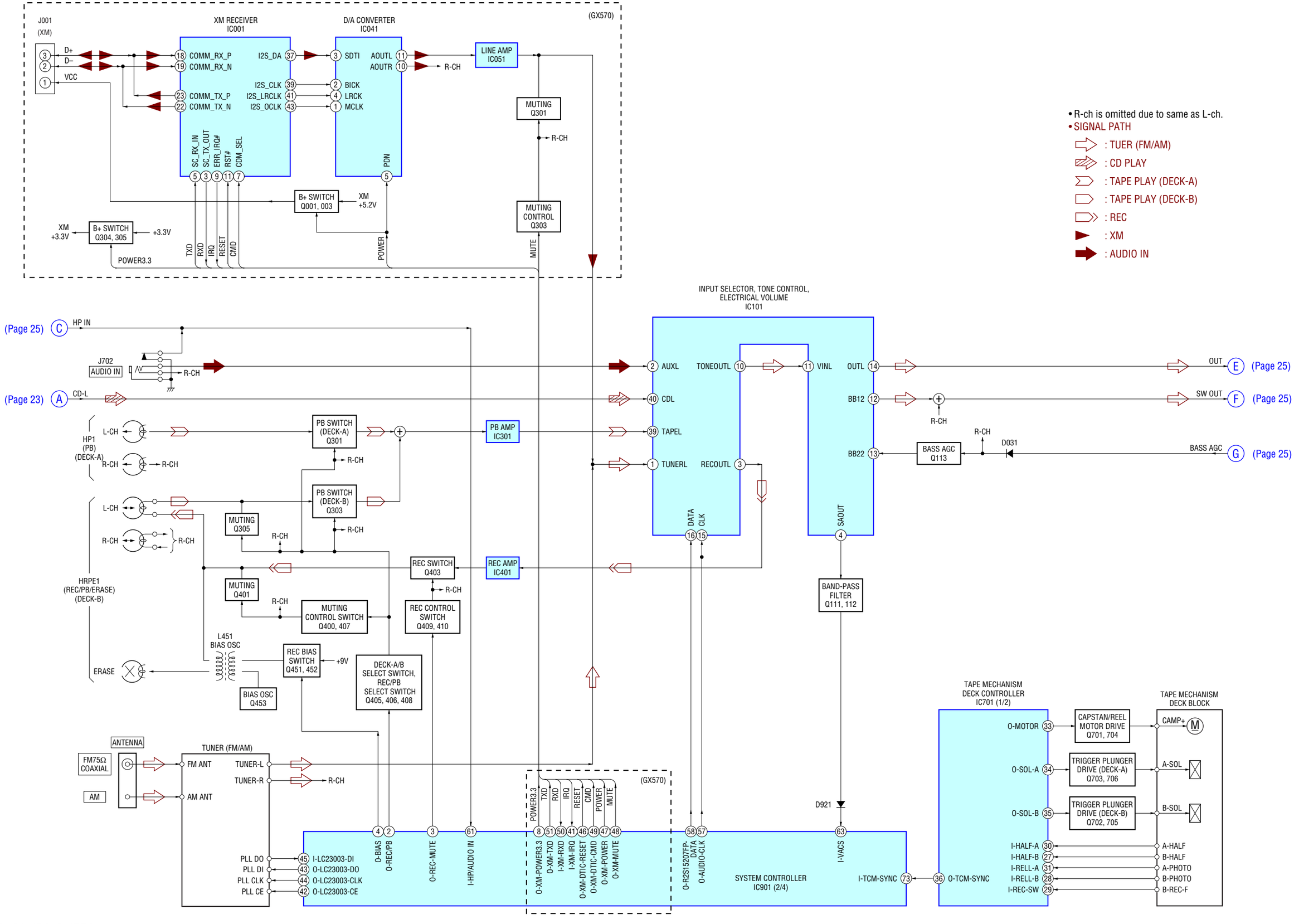
7-1. BLOCK DIAGRAM – CD SERVO Section –



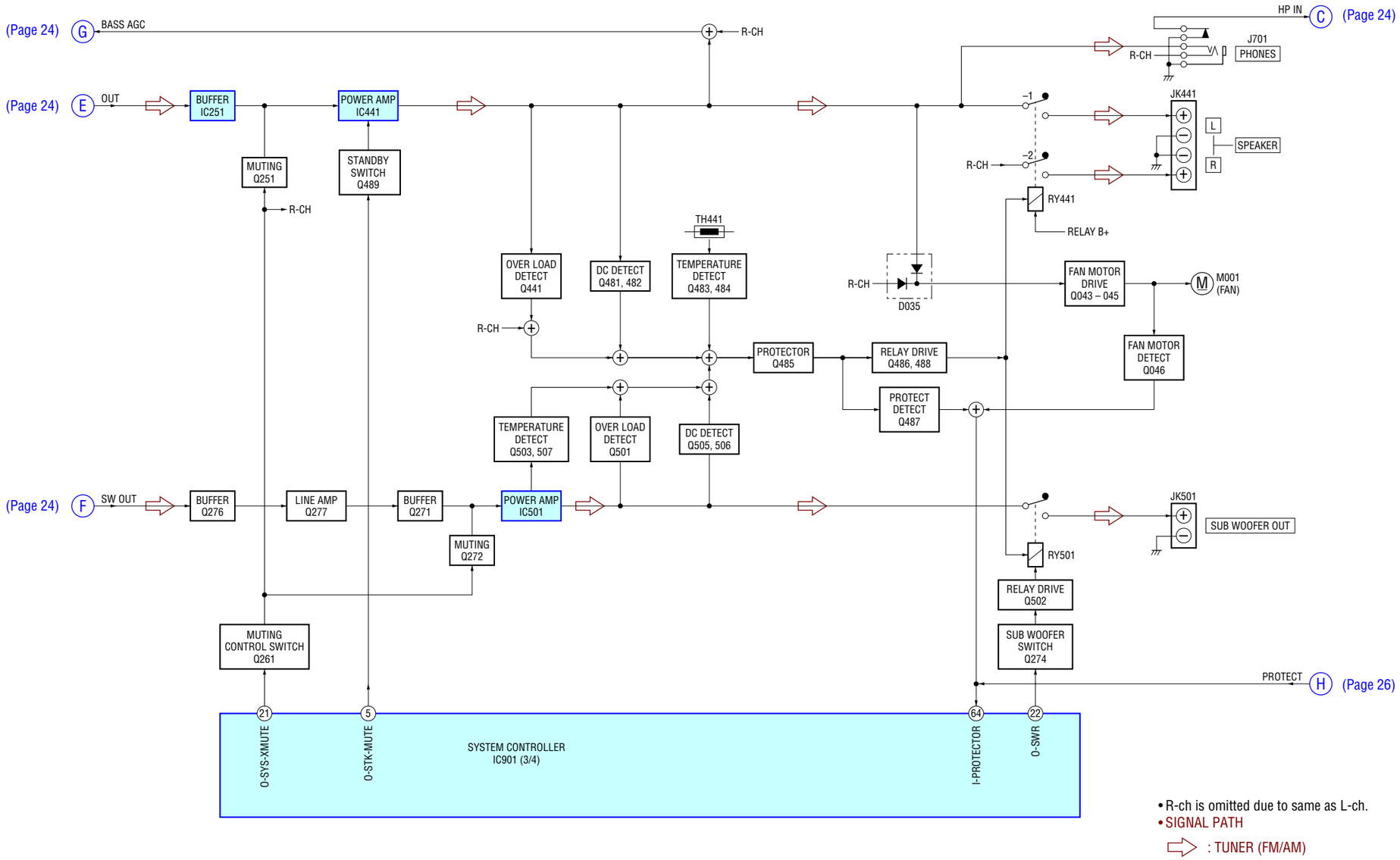
- R-ch is omitted due to same as L-ch.
- SIGNAL PATH

  : CD PLAY

7-2. BLOCK DIAGRAM – MAIN Section –

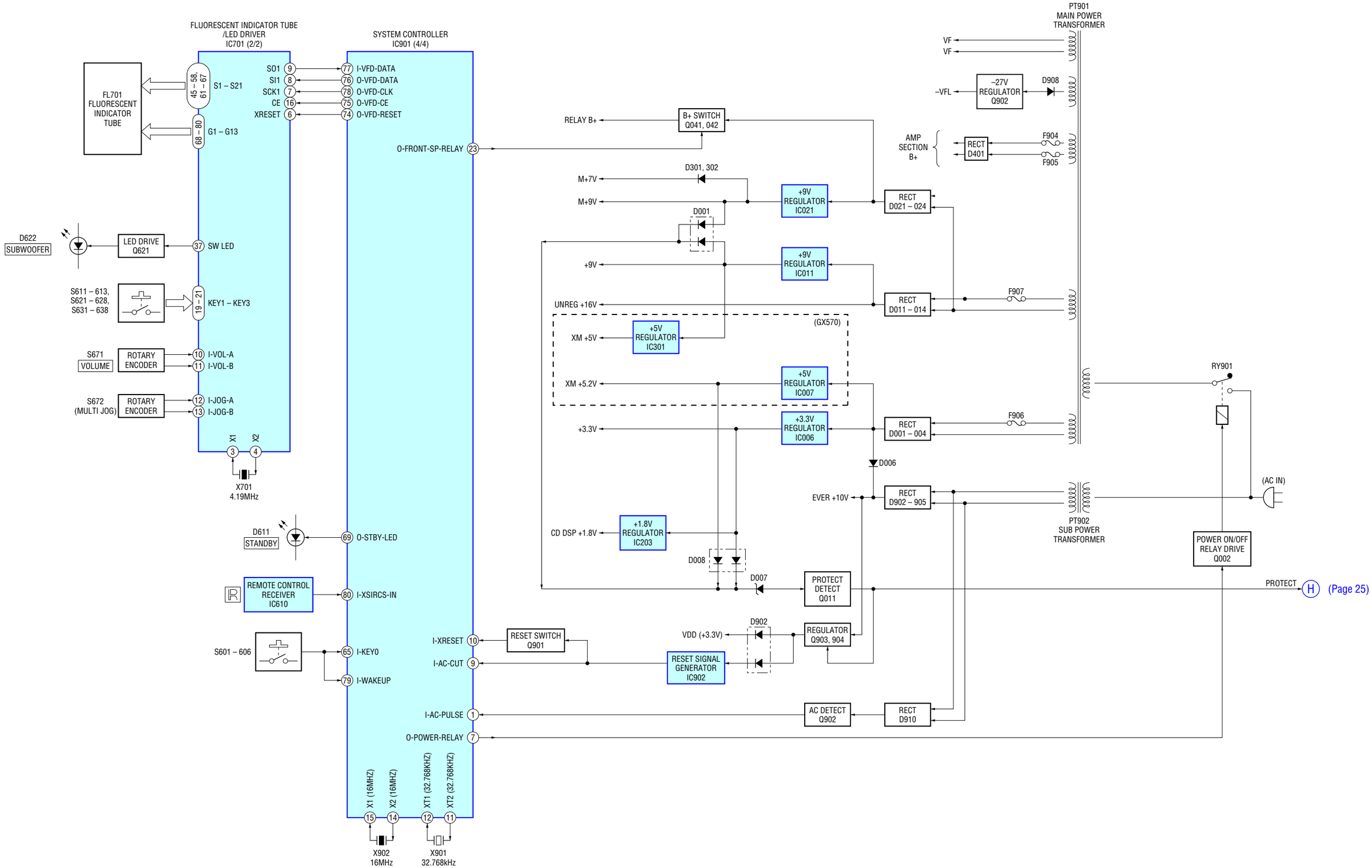


7-3. BLOCK DIAGRAM – AMP Section –



• R-ch is omitted due to same as L-ch.
• SIGNAL PATH
⇨ : TUNER (FM/AM)

7-4. BLOCK DIAGRAM – PANEL, POWER SUPPLY Section –



• Note For Printed Wiring Boards and Schematic Diagrams

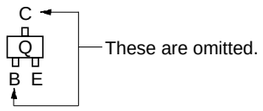
Note on Printed Wiring Board:

- ○——— : parts extracted from the component side.
- ——— : parts extracted from the conductor side.
- △ : internal component.
- ▬ : Pattern from the side which enables seeing.

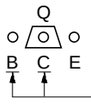
(The other layers' patterns are not indicated.)

Caution:	
Pattern face side: (Conductor Side)	Parts on the pattern face side seen from the pattern face are indicated.
Parts face side: (Component Side)	Parts on the parts face side seen from the parts face are indicated.

- Indication of transistor



These are omitted.



These are omitted.

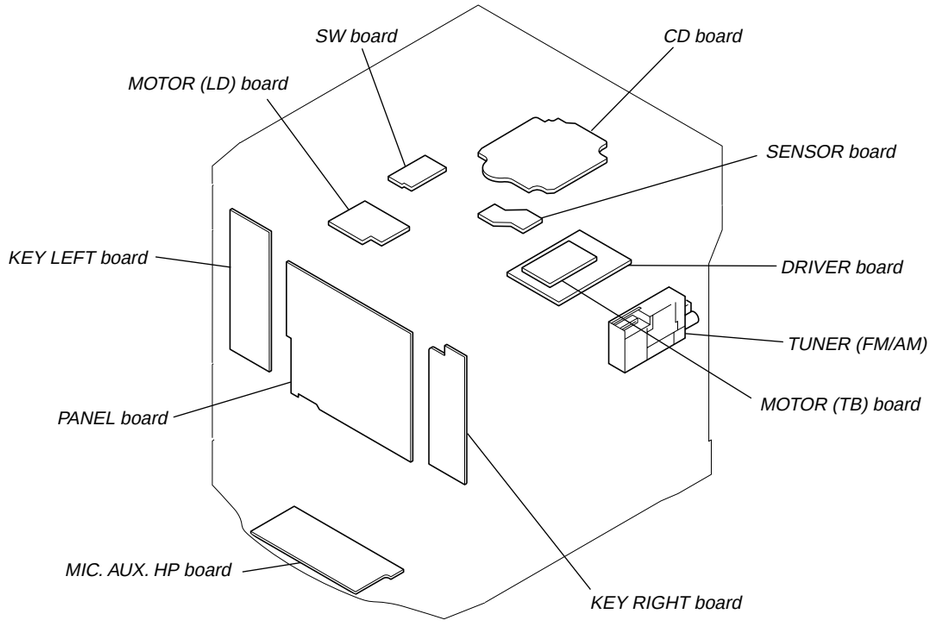
Note on Schematic Diagram:

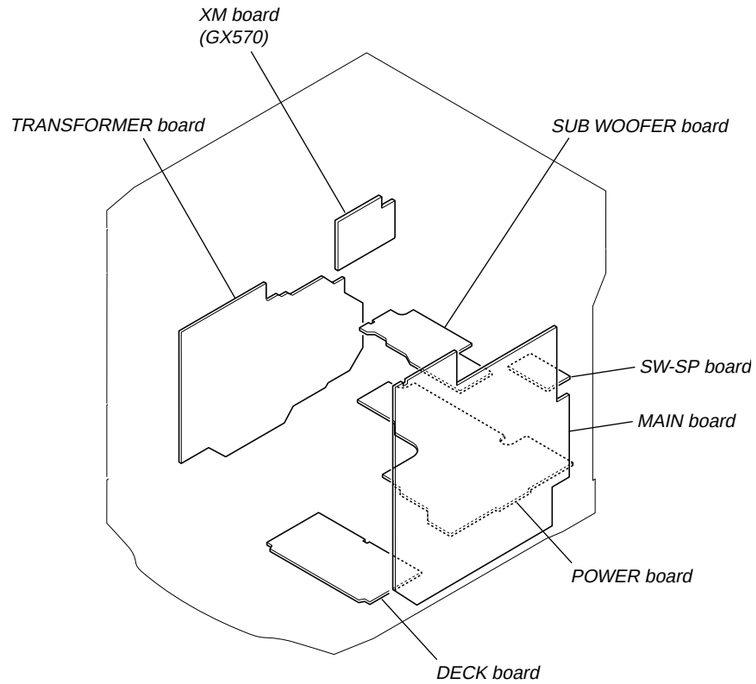
- All capacitors are in µF unless otherwise noted. (p: pF) 50 WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in Ω and 1/4 W or less unless otherwise specified.
- △ : internal component.
- : nonflammable resistor.
- : fusible resistor.
- : panel designation.

Note:	**Note:**
The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety. Replace only with part number specified.	Les composants identifiés par une marque ⚠ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

- ▬▬▬ : B+ Line.
- ▬ ▬ ▬ : B– Line.
- Voltages and waveforms are dc with respect to ground under no-signal (detuned) conditions.
  – CD Board –
  no mark :CD PLAY
  – XM Board –
  no mark : XM
  – Other Boards –
  no mark : TUNER (FM/AM)
  ( ) : CD PLAY
  ⟨⟨ ⟩⟩ : TAPE PLAY
  { } : TAPE REC
  [ ] : XM
  * : Impossible to measure
- Voltages are taken with a VOM (Input impedance 10 MΩ). Voltage variations may be noted due to normal production tolerances.
- Waveforms are taken with a oscilloscope. Voltage variations may be noted due to normal production tolerances.
- Circled numbers refer to waveforms.
- Signal path.
  : TUNER (FM/AM)
  : CD PLAY
  : TAPE PLAY (DECK-A)
  : TAPE PLAY (DECK-B)
  : REC
  : XM
  : AUDIO IN

• Circuit Boards Location





7-5. PRINTED WIRING BOARD – CD Board –

• See page 27 for Circuit Boards Location.

: Uses unleaded solder.

【CD BOARD】(COMPONENT SIDE)

【CD BOARD】
(CONDUCTOR SIDE)

M401
(SPINDLE)

S201
(LIMIT)

IC402

IC201

IC203

M402
(SLED)

TP
(VC)

TP
(RFACI)

CN102

A
MAIN
BOARD
CN301
(Page 34)

CN301

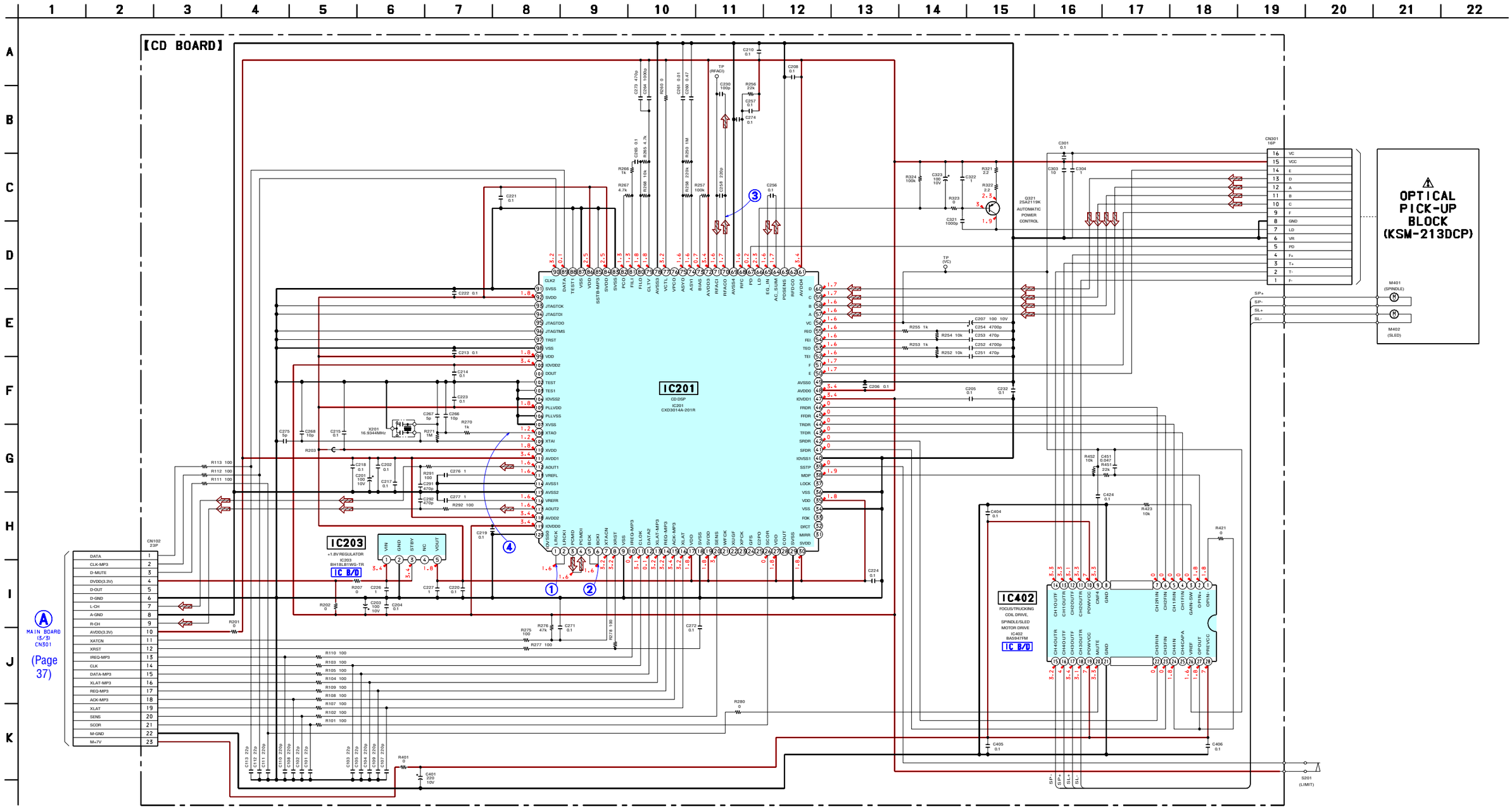
OPTICAL PICK-UP BLOCK
(KSM-213DCP)

1-868-067-

12
(12)

7-6. SCHEMATIC DIAGRAM – CD Board –

• See page 51 for Waveforms. • See page 53 for IC Block Diagrams. • See page 56 for IC Pin Function Description.

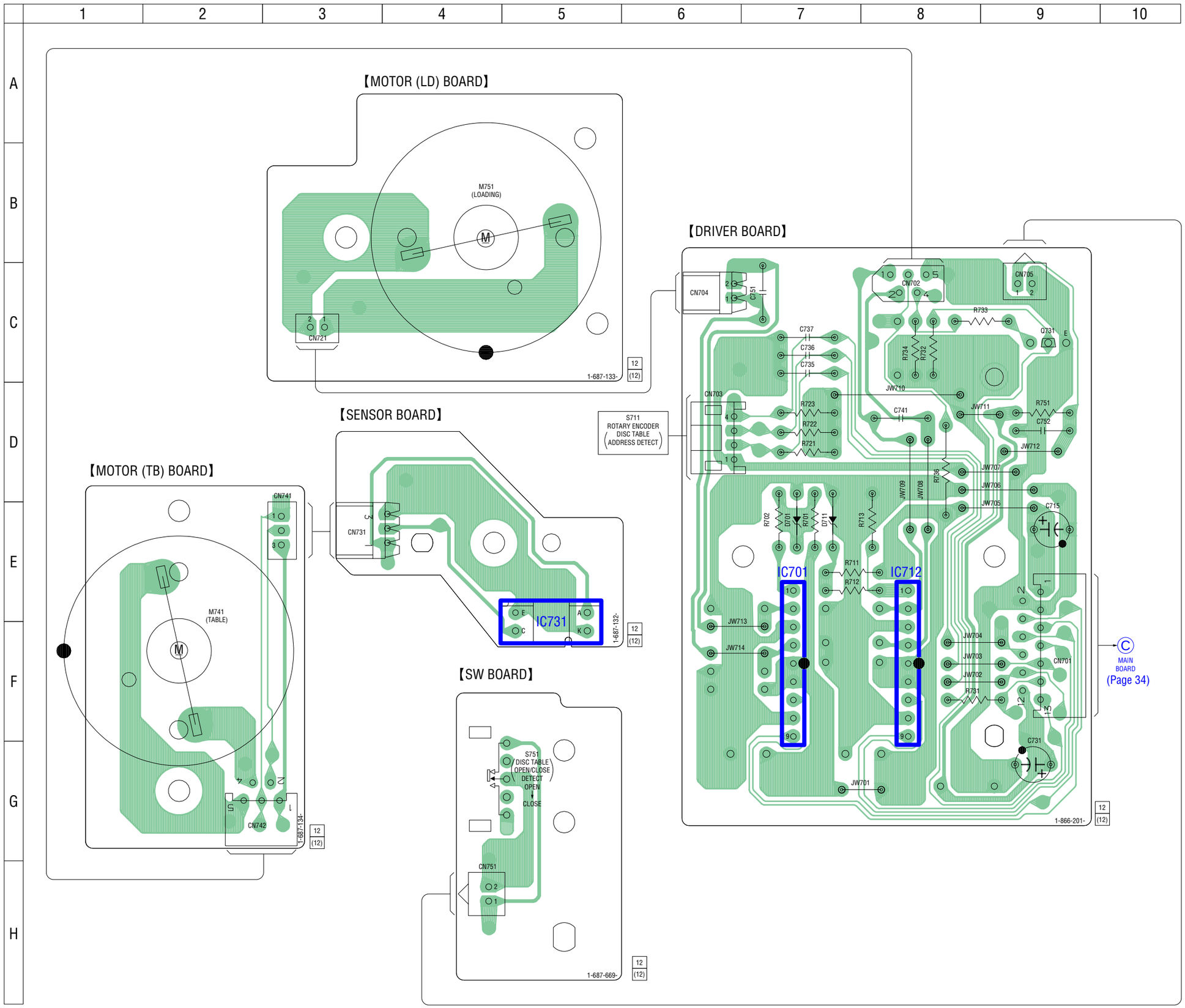


7-7. PRINTED WIRING BOARDS – CHANGER Section –

• See page 27 for Circuit Boards Location. : Uses unleaded solder.

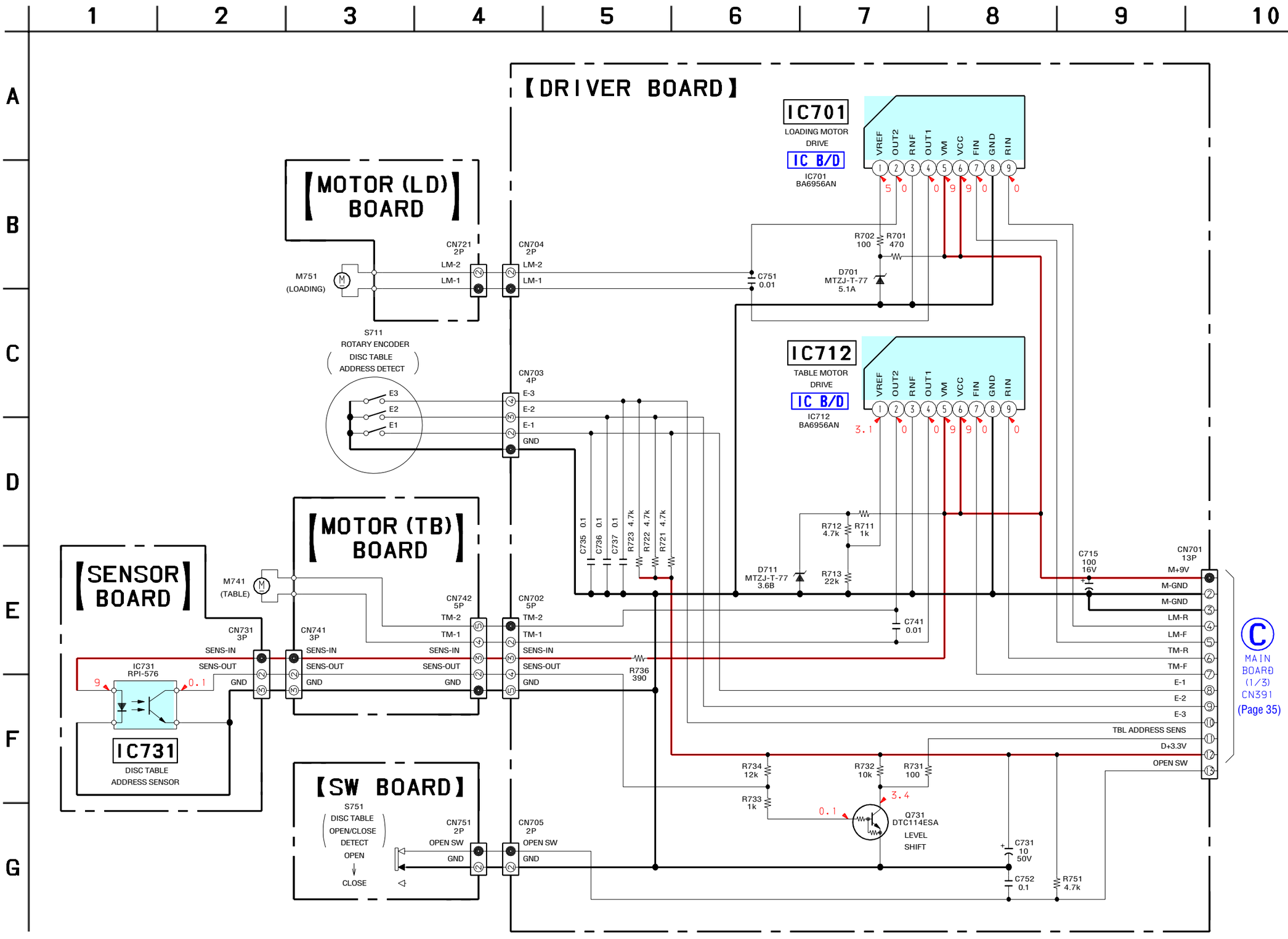
• **Semiconductor Location**

Ref. No.	Location
D701	E-7
D711	E-7
IC701	F-7
IC712	F-8
IC731	F-5
Q731	C-9



7-8. SCHEMATIC DIAGRAM – CHANGER Section –

• See page 53 for IC Block Diagrams.

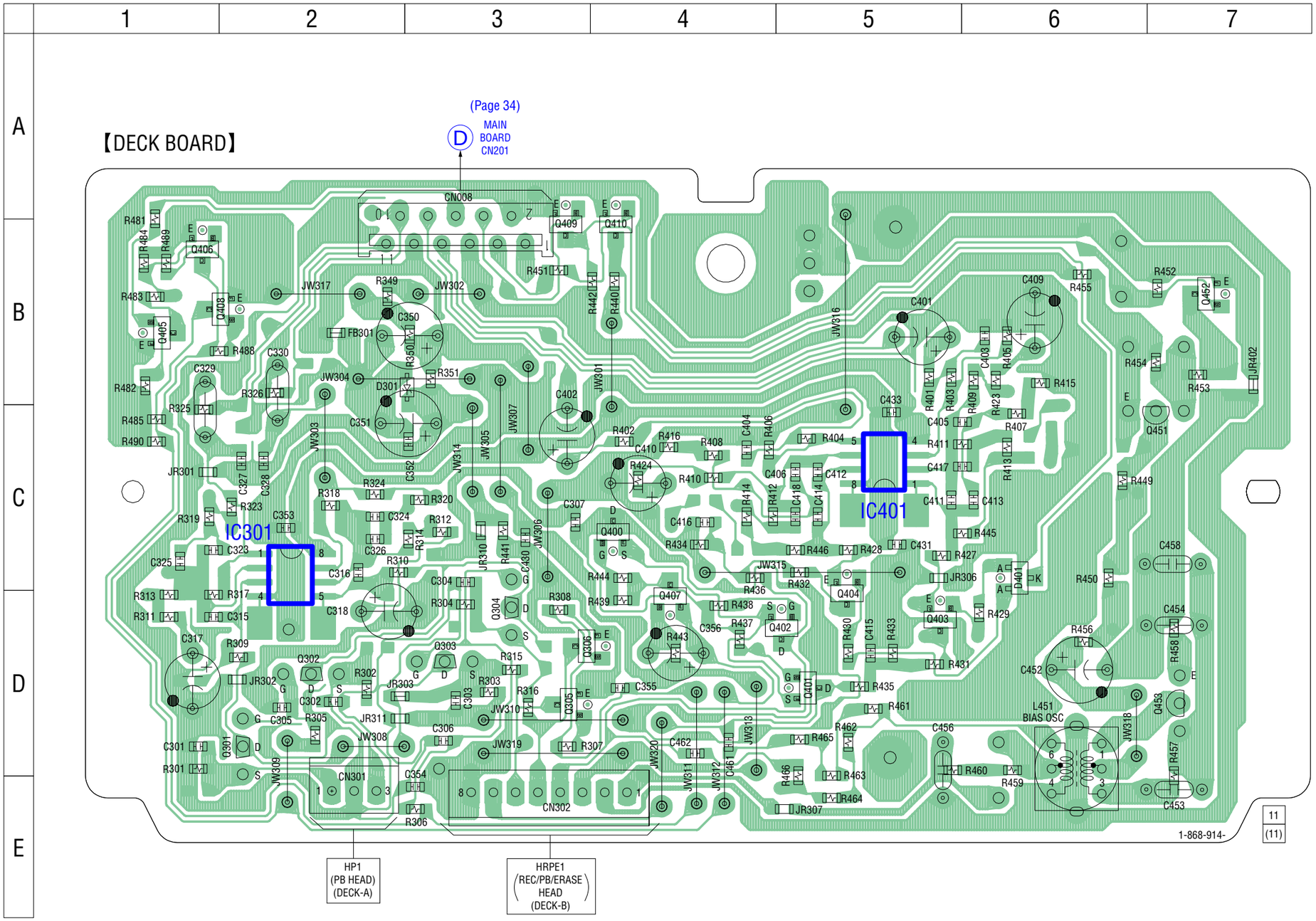


7-9. PRINTED WIRING BOARD – DECK Board –

• See page 27 for Circuit Boards Location. : Uses unleaded solder.

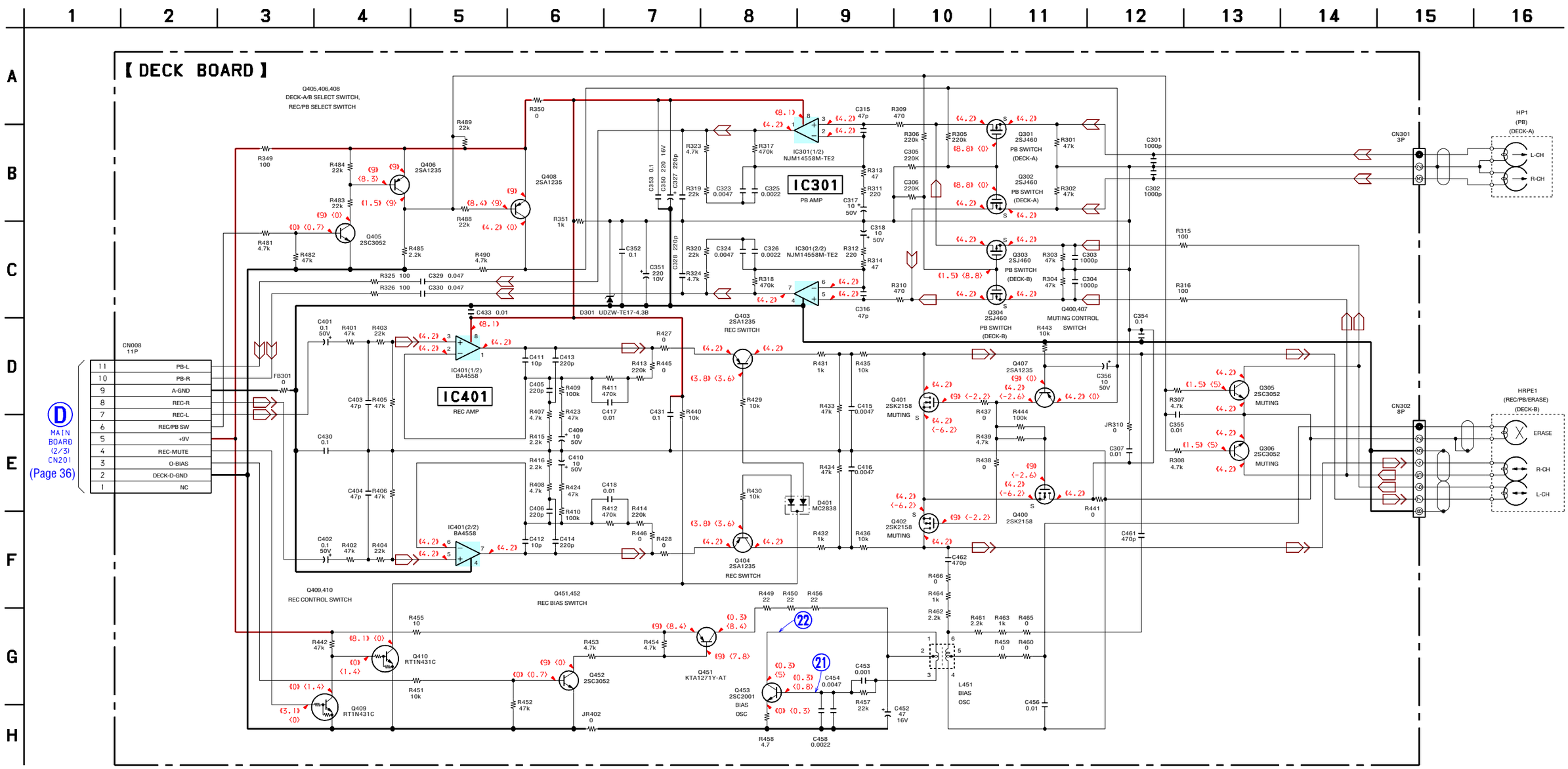
• **Semiconductor Location**

Ref. No.	Location
D301	B-3
D401	C-6
IC301	C-2
IC401	C-5
Q301	D-2
Q302	D-2
Q303	D-3
Q304	D-3
Q305	D-3
Q306	D-3
Q400	C-4
Q401	D-5
Q402	D-5
Q403	D-5
Q404	D-5
Q405	B-1
Q406	B-1
Q407	D-4
Q408	B-2
Q409	B-3
Q410	B-4
Q451	C-7
Q452	B-7
Q453	D-7



7-10. SCHEMATIC DIAGRAM – DECK Board –

• See page 51 for Waveforms.



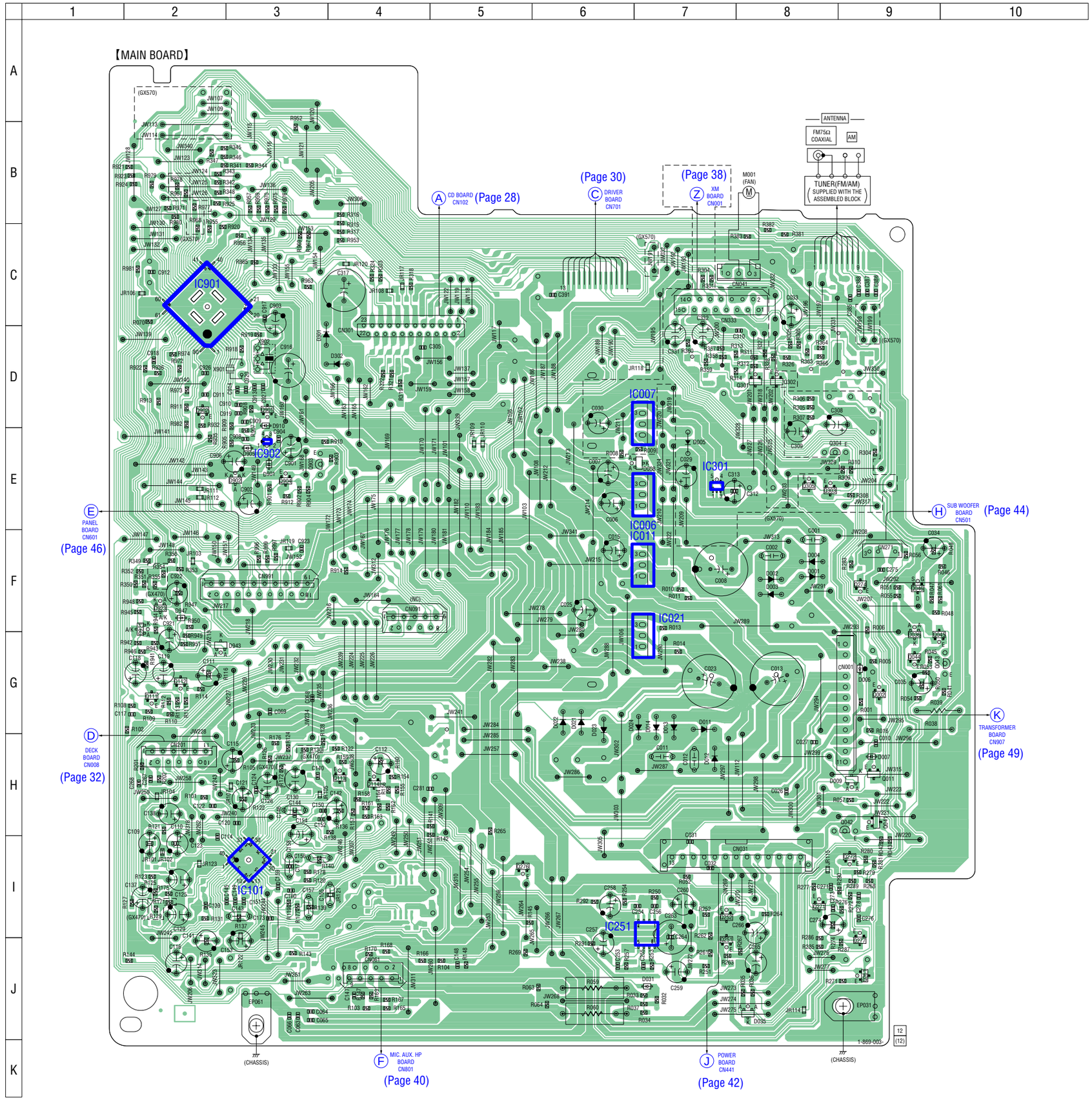
7-11. PRINTED WIRING BOARD – MAIN Board –

• See page 27 for Circuit Boards Location.

: Uses unleaded solder.

- **Semiconductor Location**

Ref. No.	Location
D001	F-8
D002	F-8
D003	F-8
D004	F-8
D005	E-7
D006	G-9
D007	H-9
D008	E-7
D009	H-9
D011	G-7
D012	H-7
D013	G-7
D014	G-7
D021	G-6
D022	G-6
D023	G-6
D024	G-7
D031	J-7
D035	J-8
D036	G-9
D301	D-3
D302	D-4
D901	E-3
D902	E-3
D905	E-3
D910	D-3
D921	F-2
D923	F-2
D943	G-2
D947	F-2
IC006	E-7
IC007	E-7
IC011	F-7
IC021	G-7
IC101	I-3
IC251	I-7
IC301	E-7
IC901	C-2
IC902	E-3
Q002	G-9
Q011	H-9
Q041	H-9
Q042	H-9
Q043	G-9
Q044	G-9
Q045	G-9
Q046	F-9
Q111	G-2
Q112	G-2
Q113	H-4
Q114	H-4
Q251	J-7
Q252	I-7
Q261	J-9
Q271	I-8
Q272	I-9
Q274	F-9
Q276	I-5
Q277	J-9
Q301	D-8
Q302	D-8
Q303	E-8
Q304	E-8
Q305	E-8
Q901	D-3
Q902	D-2
Q903	E-3
Q904	E-3



Note: IC901 on the MAIN board cannot exchange with single. When IC901 is damaged, exchange the entire mounted board.

7-12. SCHEMATIC DIAGRAM – MAIN Board (1/3) –

• See page 51 for Waveforms. • See page 56 for IC Pin Function Description.

【MAIN BOARD】(1/3)

IC901
SYSTEM CONTROLLER
IC901
mPD78F0547GC (S)
-UBT-A

IC902
RESET SIGNAL
GENERATOR
IC902
PST3429UL

Q901
2SC3052
RESET SWITCH

Q902
2SC3052
AC DETECT

Q903
KTA1271Y-AT

Q903,904
REGULATOR

Q904
2SC3052

CN991
19P

CN091
9P

(NC)

PANEL BOARD CN601 (Page 48)

DRIVER BOARD CN701 (Page 31)

MAIN BOARD (3/3) (Page 37)

MAIN BOARD (2/3) (Page 36)

MAIN BOARD (2/3) (Page 36)

MAIN BOARD (3/3) (Page 37)

(GX570)

*R356
10k(GX570)
1M(GX470)
(GX470)

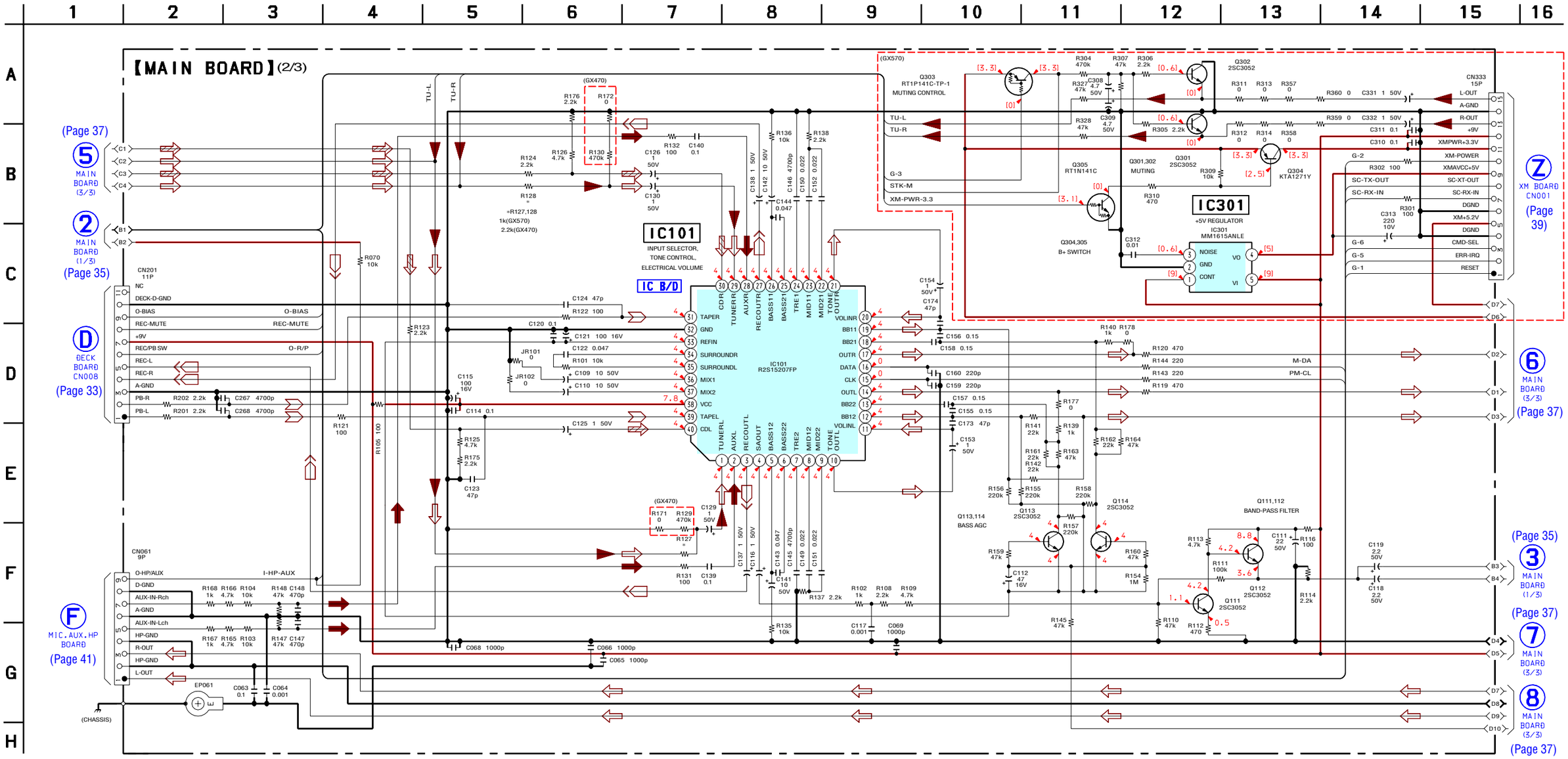
TCM-SYNC

JW339

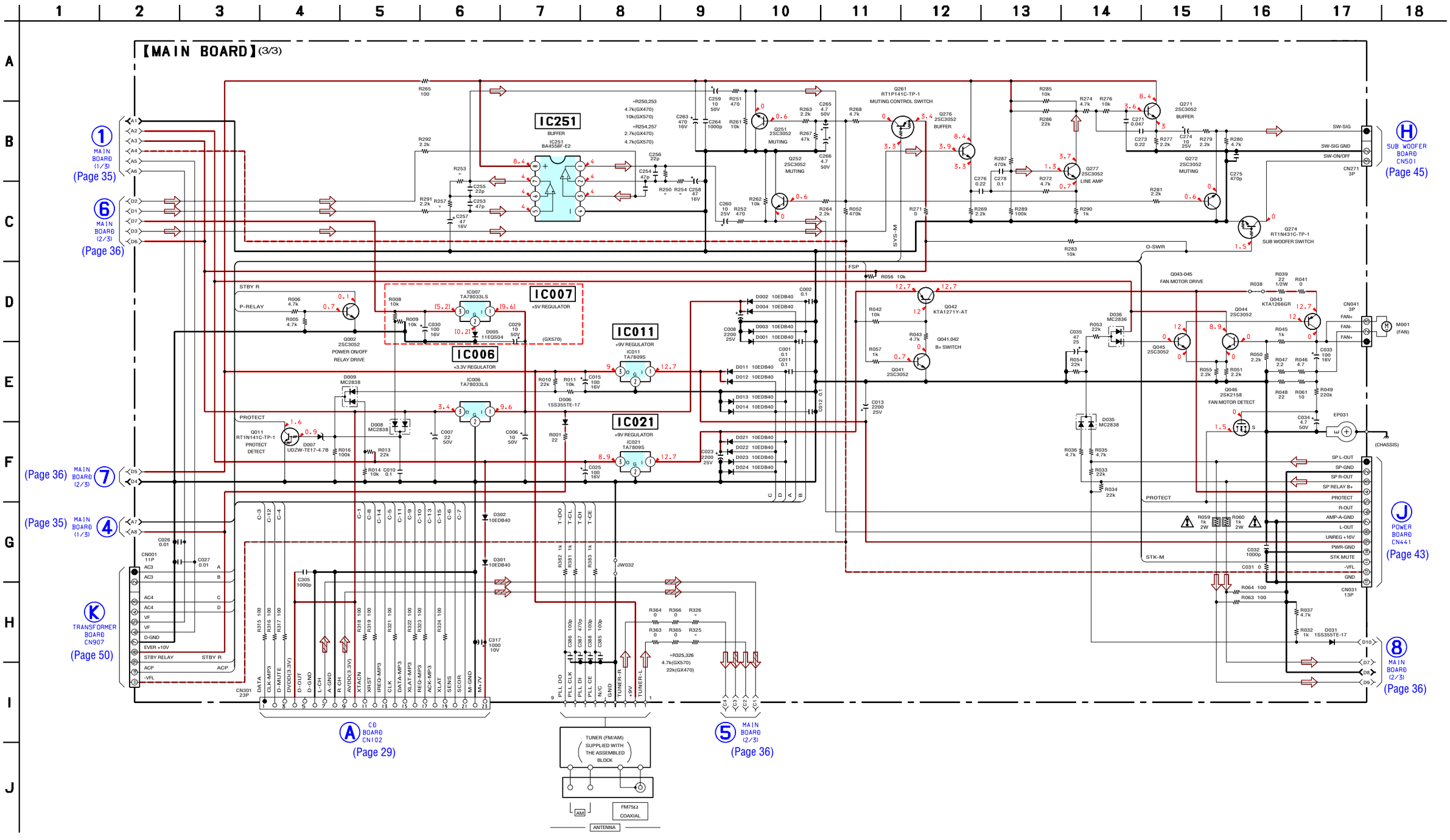
Note: IC901 on the MAIN board cannot exchange with single. When IC901 is damaged, exchange the entire mounted board.

7-13. SCHEMATIC DIAGRAM – MAIN Board (2/3) –

• See page 53 for IC Block Diagrams.



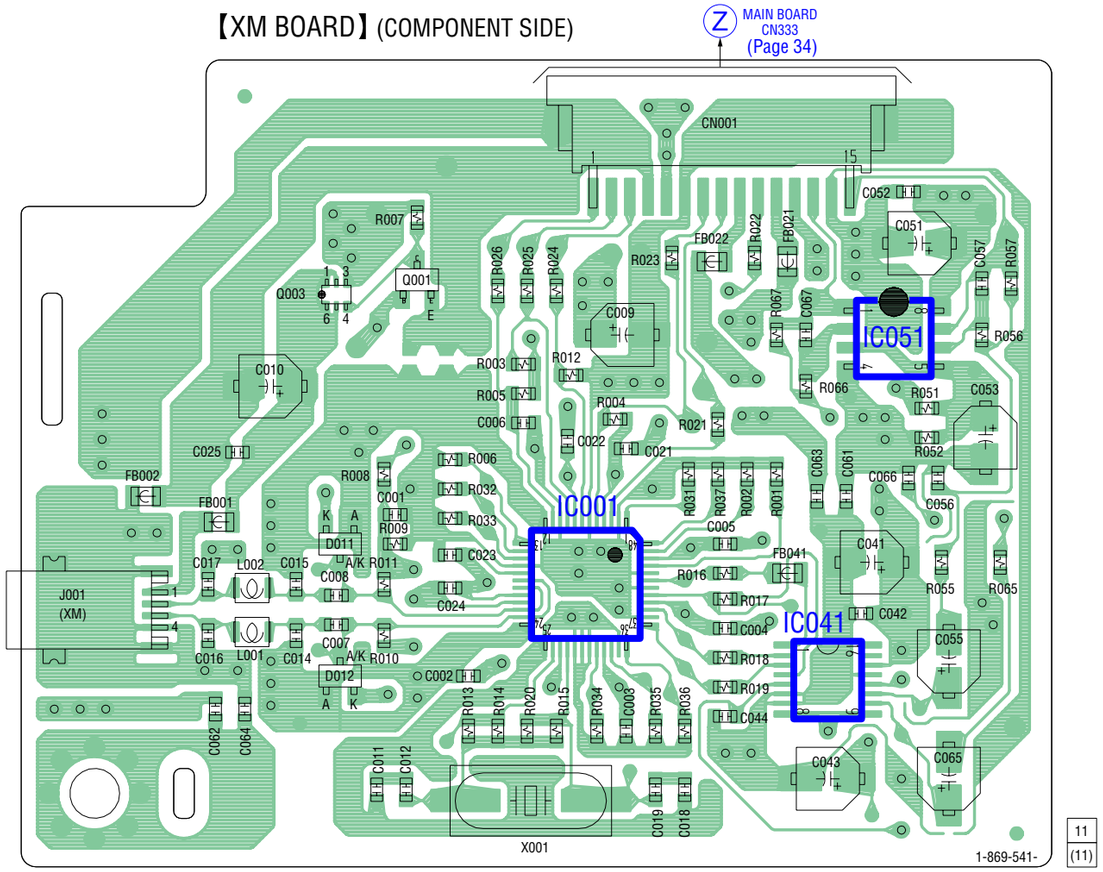
7-14. SCHEMATIC DIAGRAM – MAIN Board (3/3) –



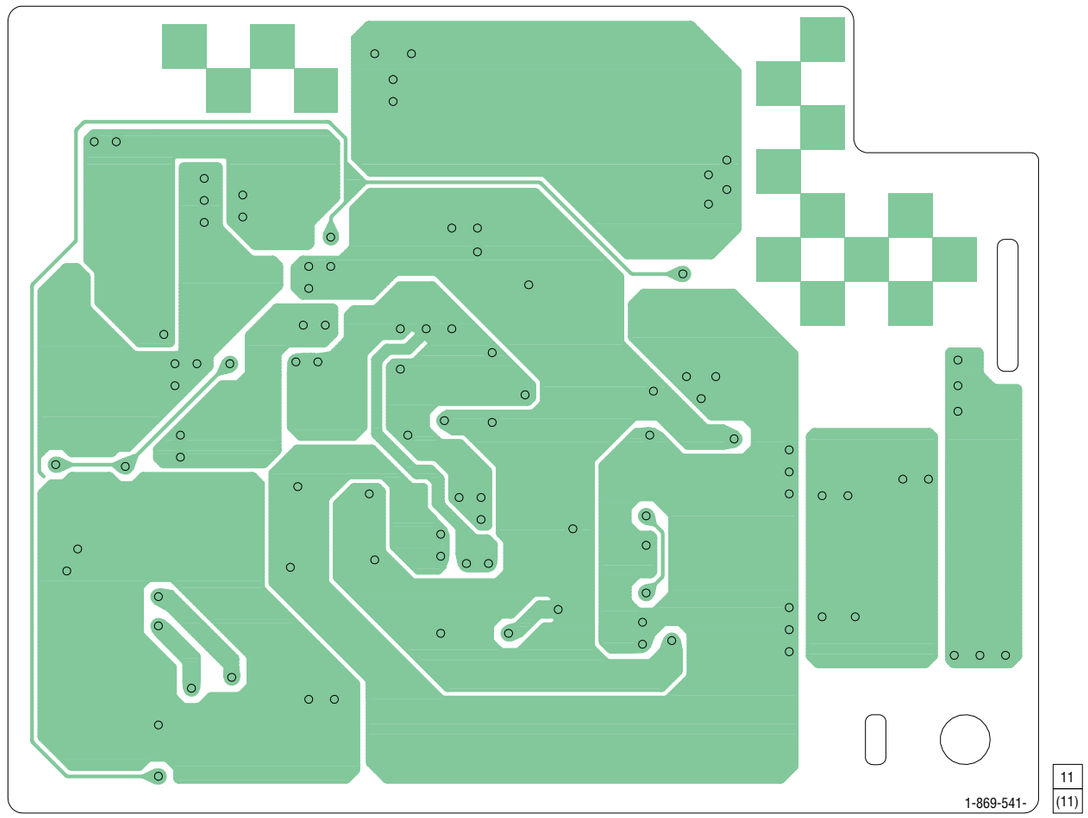
7-15. PRINTED WIRING BOARD – XM Board (GX570) –

• See page 27 for Circuit Boards Location. : Uses unleaded solder.

【XM BOARD】(COMPONENT SIDE)



【XM BOARD】(CONDUCTOR SIDE)

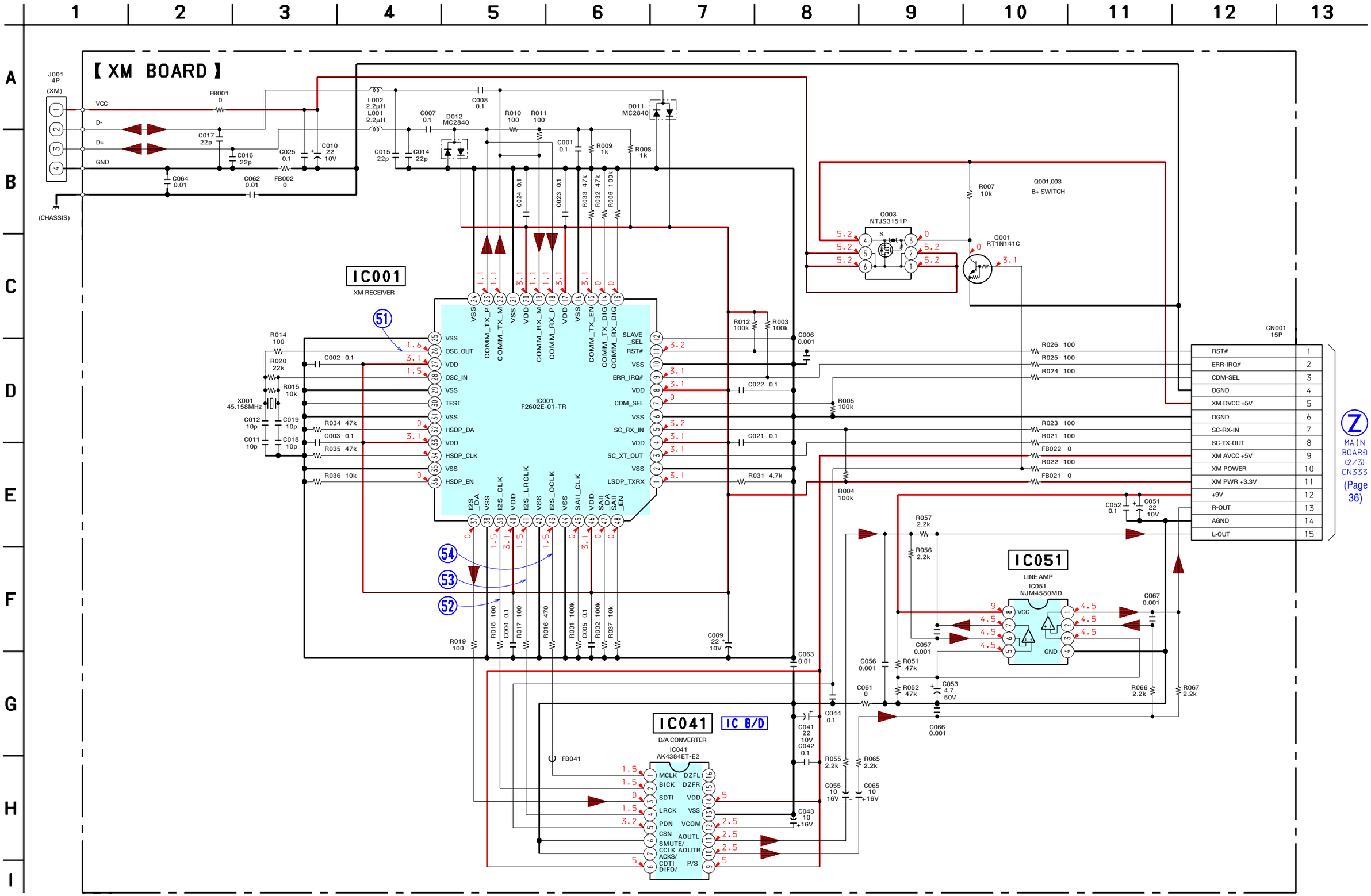


• **Semiconductor Location**

Ref. No.	Location
D011	C-2
D012	D-2
IC001	C-3
IC041	D-4
IC051	B-4
Q001	B-2
Q003	B-2

7-16. SCHEMATIC DIAGRAM – XM Board (GX570) –

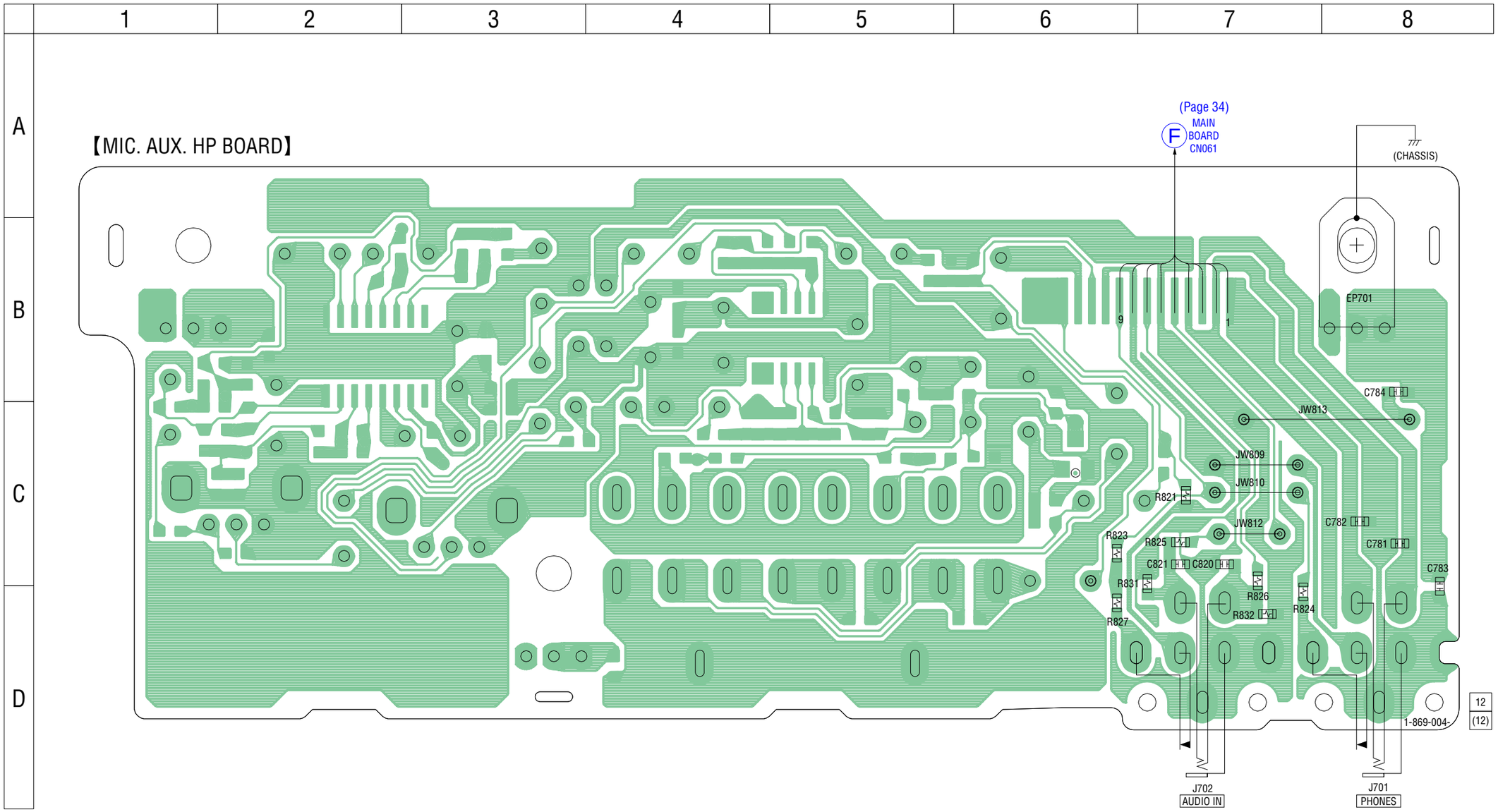
• See page 51 for Waveforms. • See page 53 for IC Block Diagrams. • See page 56 for IC Pin Function Description.



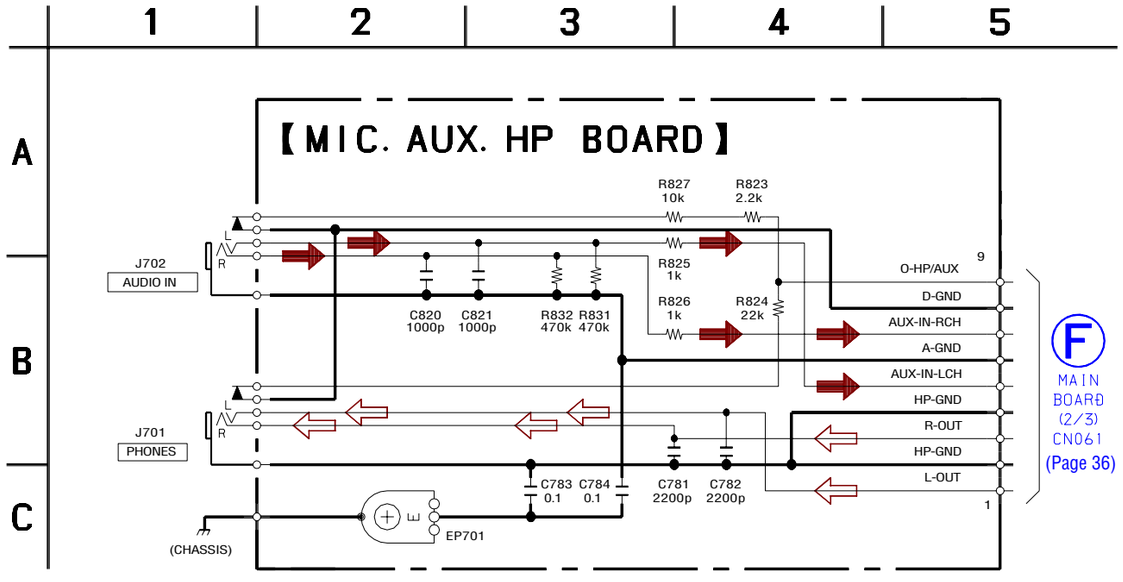
7-17. PRINTED WIRING BOARD – MIC. AUX. HP Board –

• See page 27 for Circuit Boards Location.

: Uses unleaded solder.



7-18. SCHEMATIC DIAGRAM – MIC. AUX. HP Board –

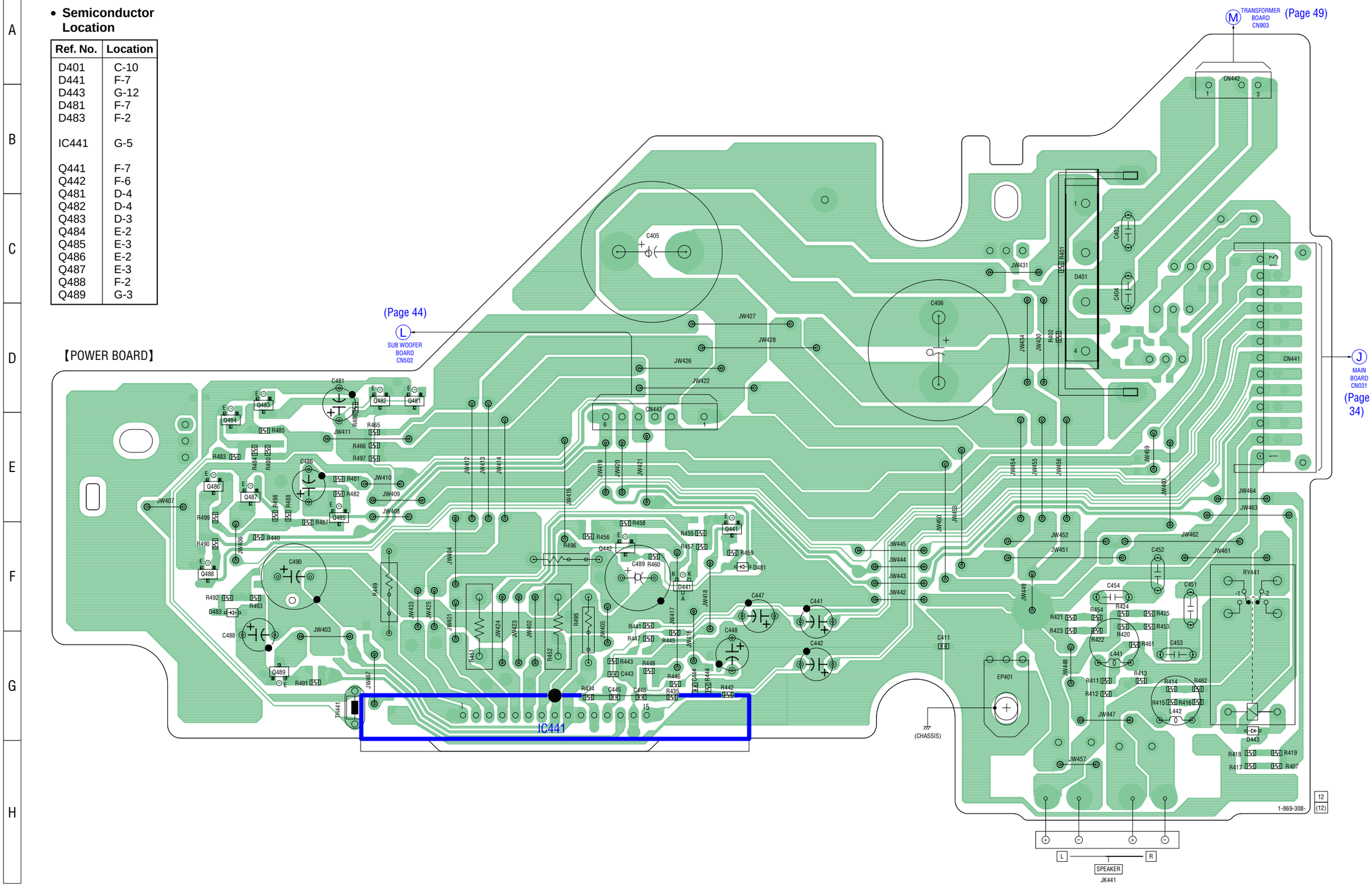


7-19. PRINTED WIRING BOARD – POWER Board –

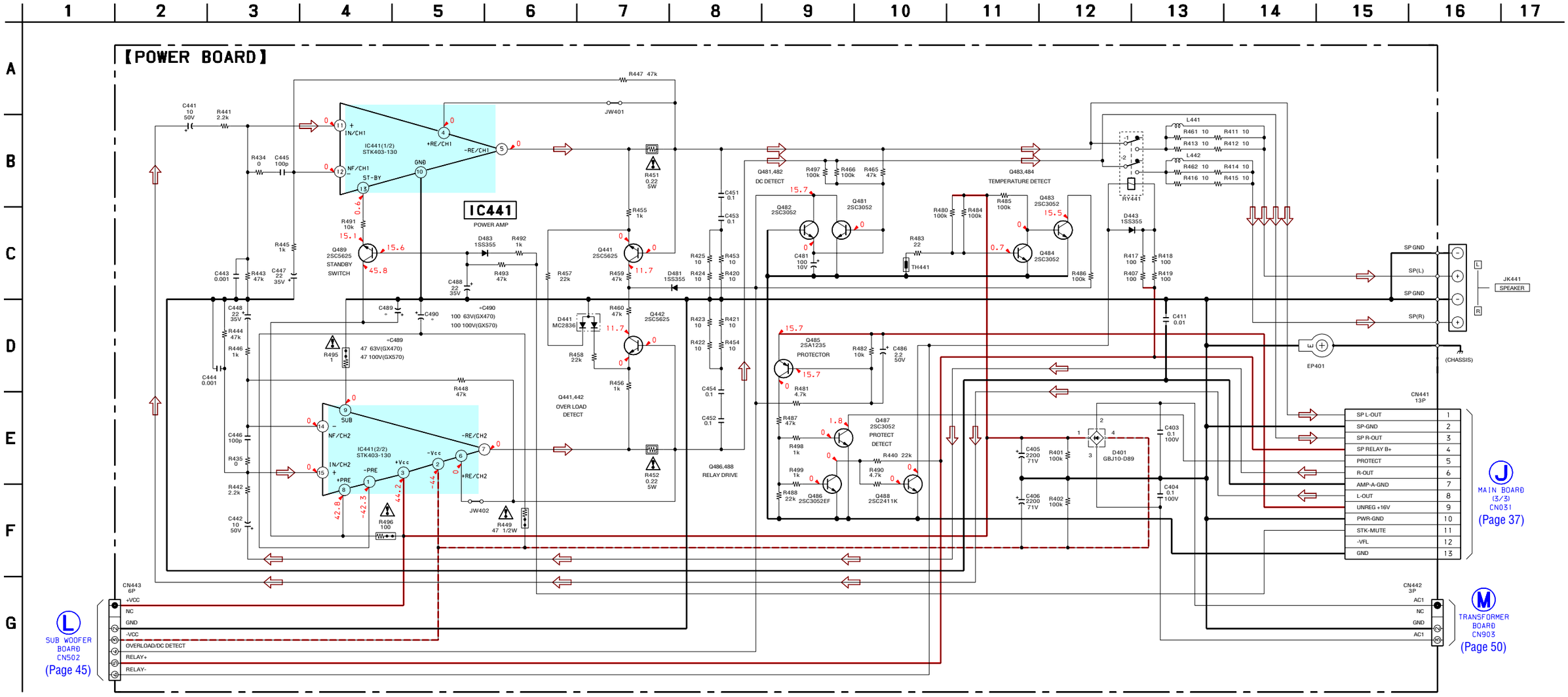
• See page 27 for Circuit Boards Location. : Uses unleaded solder.

• **Semiconductor Location**

Ref. No.	Location
D401	C-10
D441	F-7
D443	G-12
D481	F-7
D483	F-2
IC441	G-5
Q441	F-7
Q442	F-6
Q481	D-4
Q482	D-4
Q483	D-3
Q484	E-2
Q485	E-3
Q486	E-2
Q487	E-3
Q488	F-2
Q489	G-3

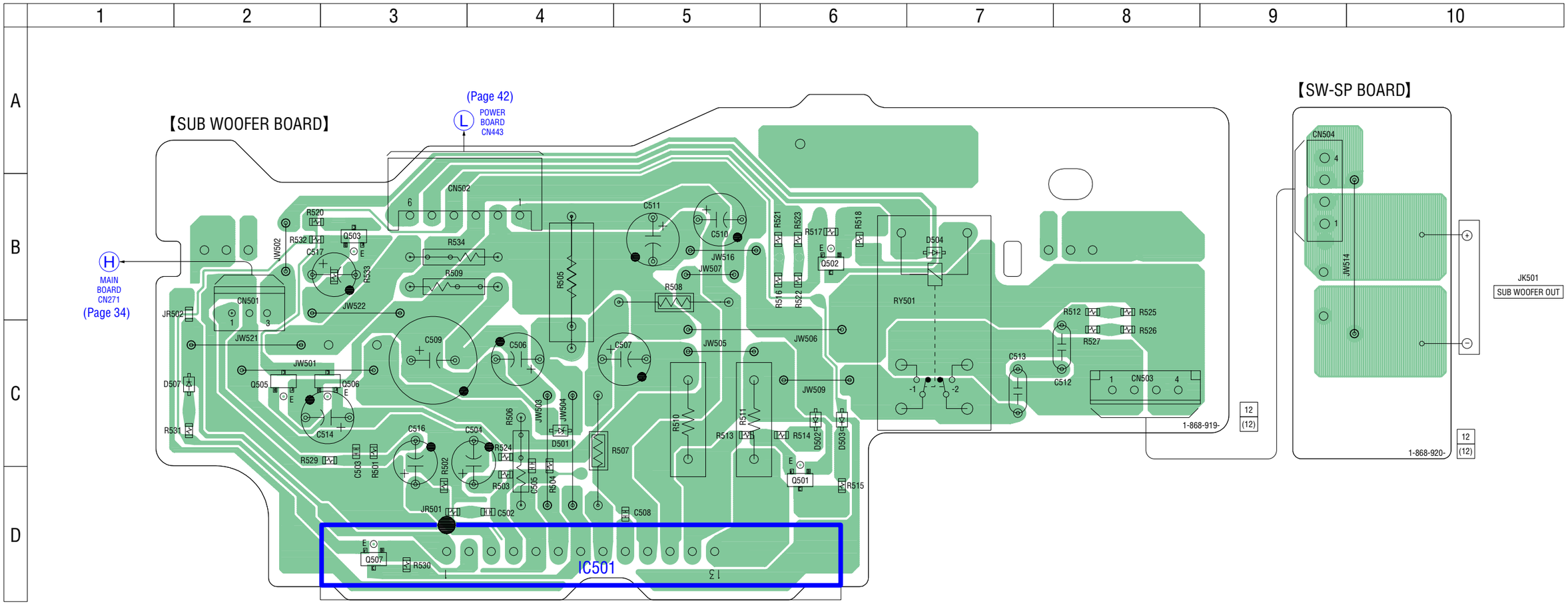


7-20. SCHEMATIC DIAGRAM – POWER Board –



7-21. PRINTED WIRING BOARDS – SUB WOOFER Section –

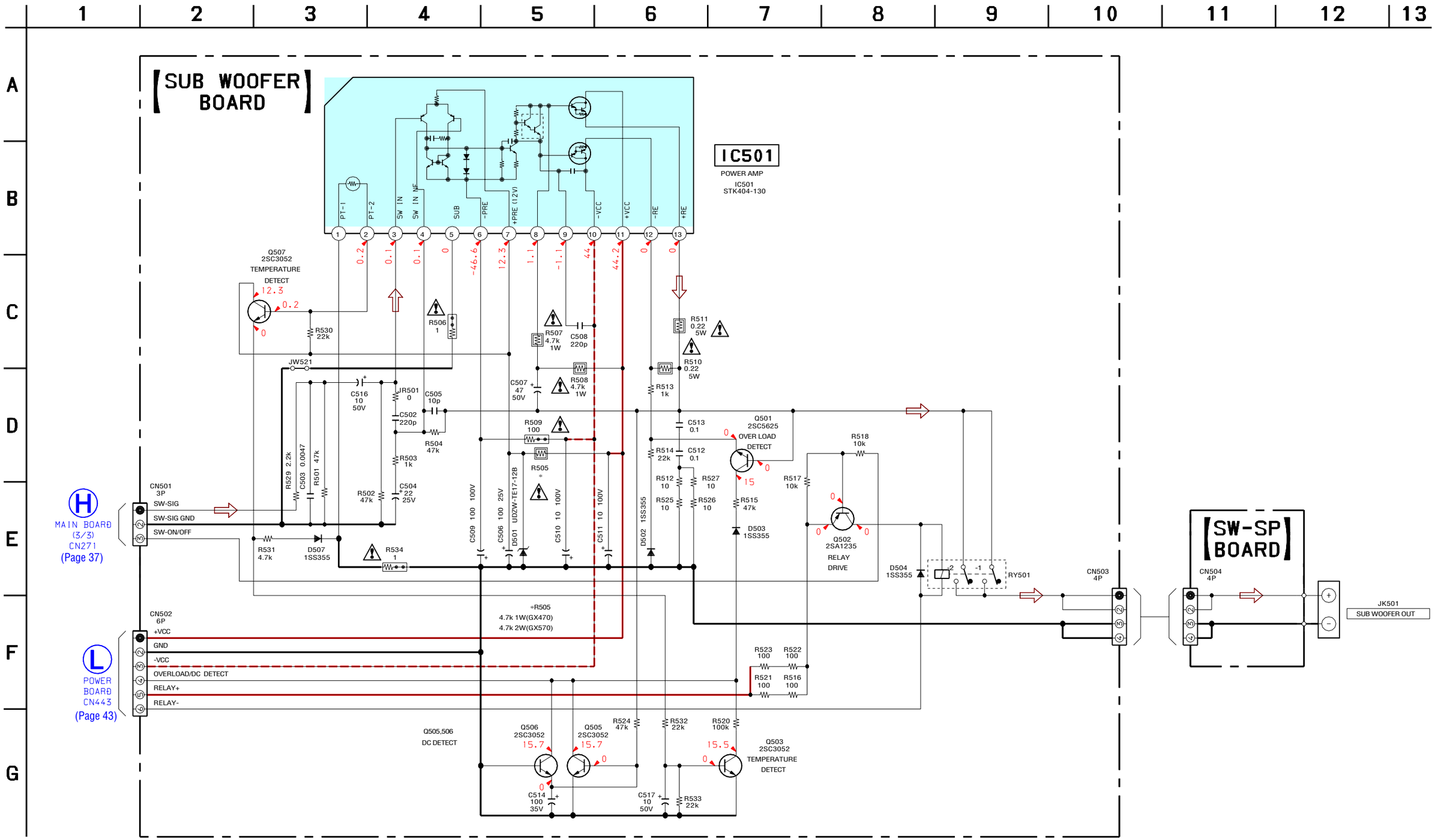
• See page 27 for Circuit Boards Location. : Uses unleaded solder.



- **Semiconductor Location**

Ref. No.	Location
D501	C-4
D502	C-6
D503	C-6
D504	B-7
D507	C-2
IC501	D-4
Q501	D-6
Q502	B-6
Q503	B-3
Q505	C-2
Q506	C-3
Q507	D-3

7-22. SCHEMATIC DIAGRAM – SUB WOOFER Section –



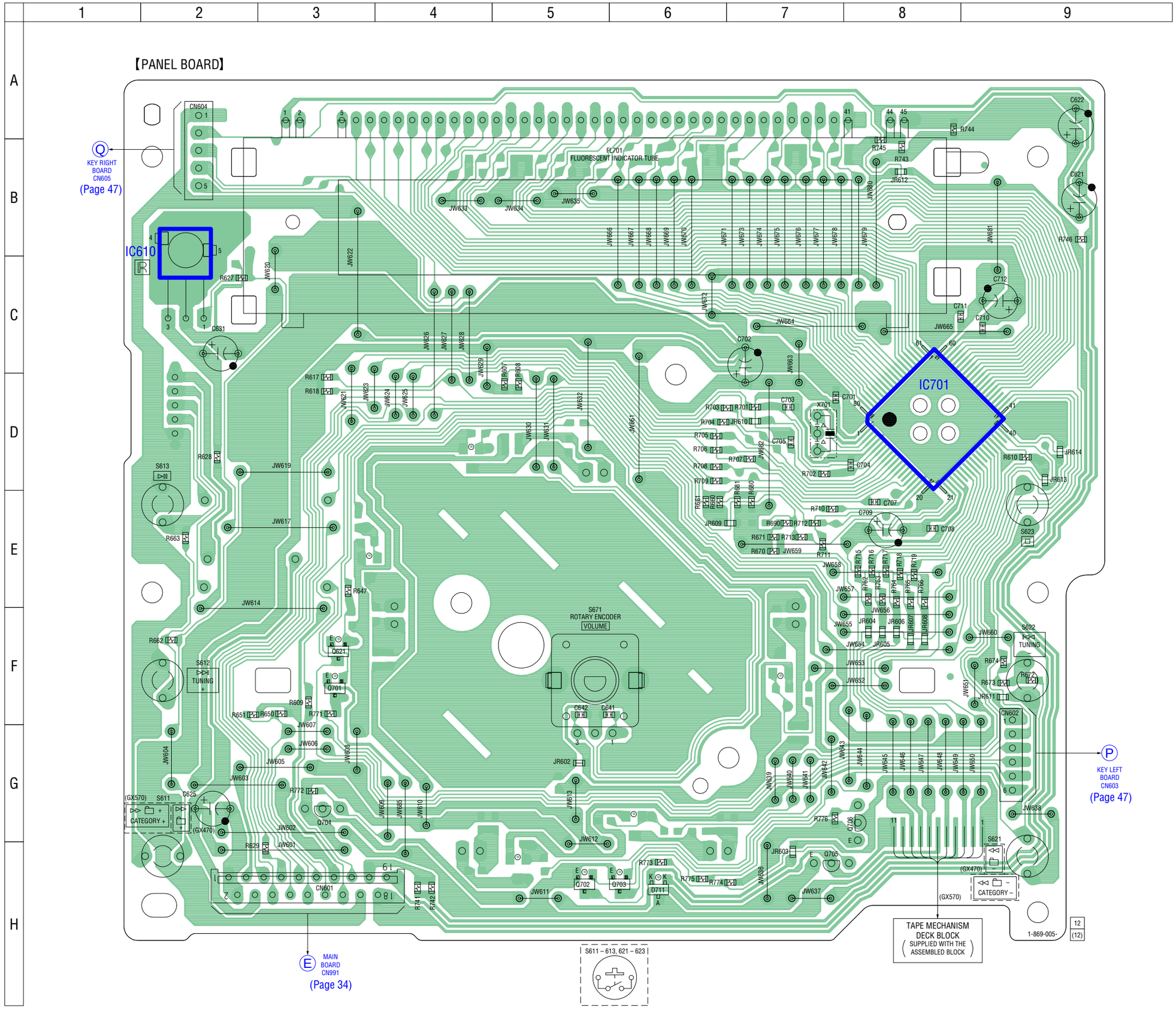
7-23. PRINTED WIRING BOARD – PANEL Board –

• See page 27 for Circuit Boards Location.

: Uses unleaded solder.

- **Semiconductor Location**

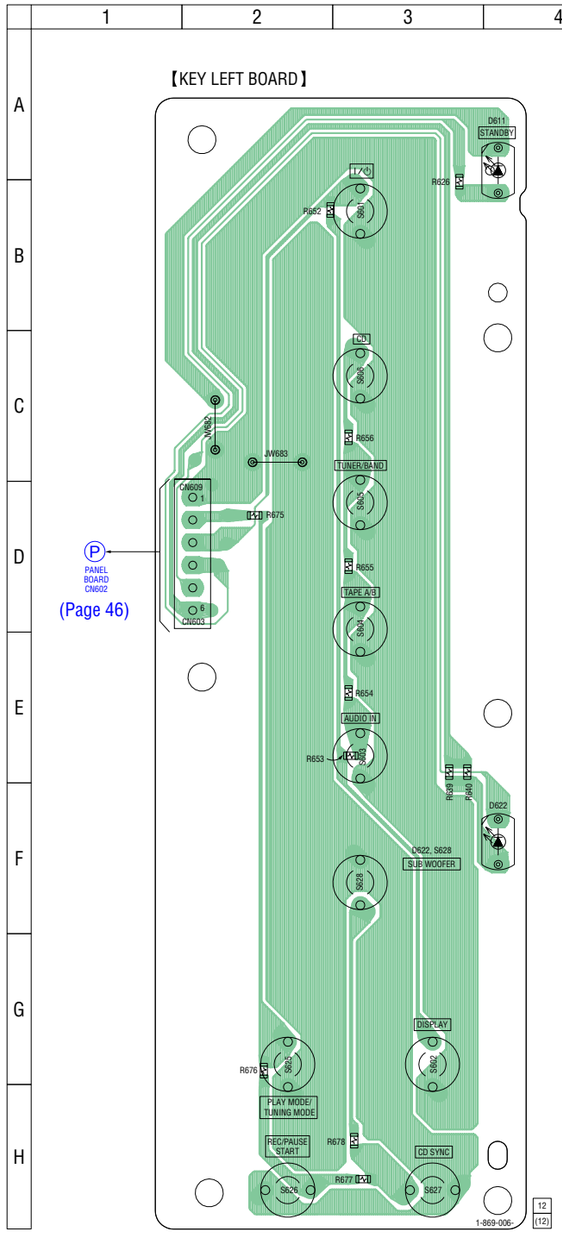
Ref. No.	Location
D711	H-6
IC610	B-1
IC701	D-8
Q621	F-3
Q701	F-3
Q702	H-5
Q703	H-6
Q704	G-3
Q705	H-7
Q706	G-8



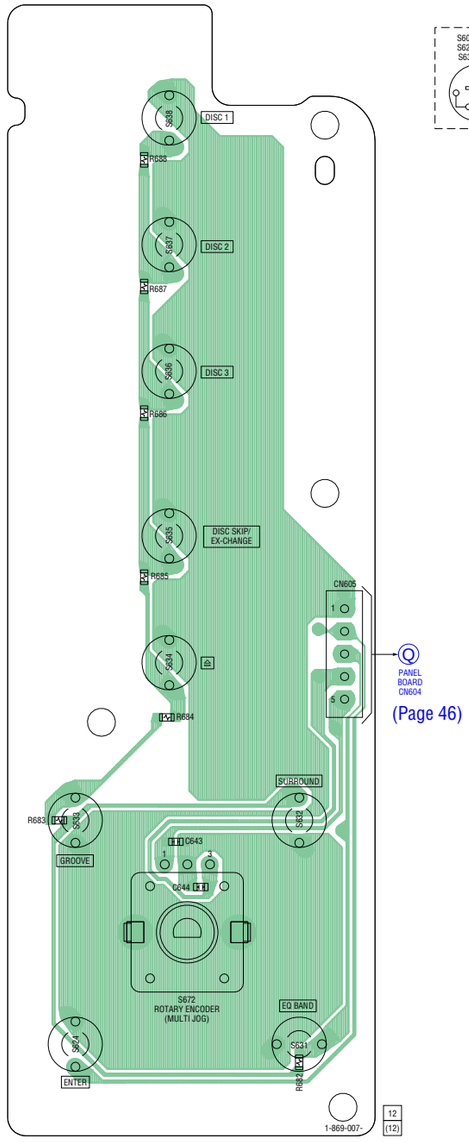
7-24. PRINTED WIRING BOARDS – KEY Section –

• See page 27 for Circuit Boards Location. : Uses unleaded solder.

【KEY LEFT BOARD】



【KEY RIGHT BOARD】

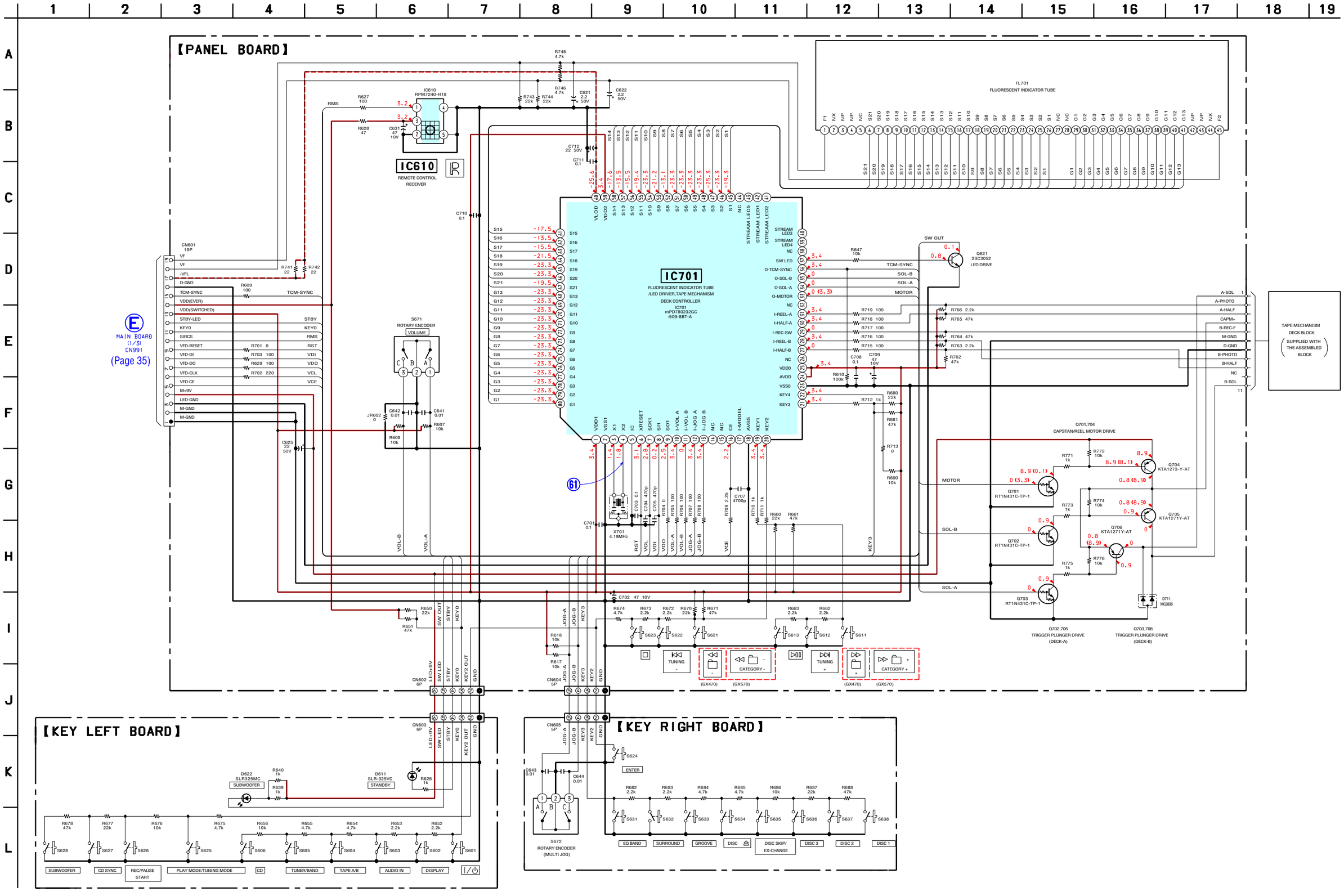


Ⓟ PANEL BOARD CN602 (Page 46)

Ⓠ PANEL BOARD CN604 (Page 46)

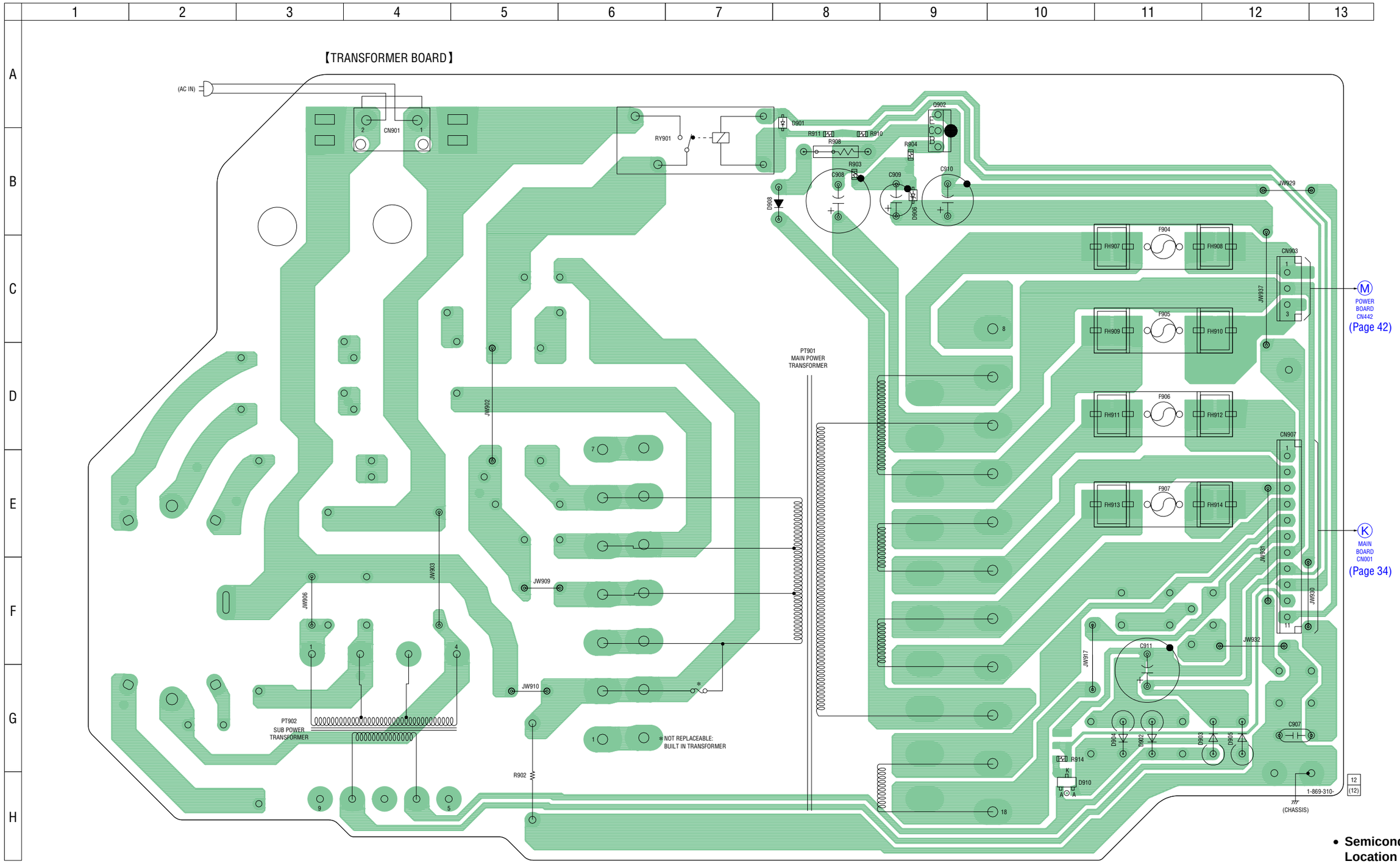
7-25. SCHEMATIC DIAGRAM – PANEL Section –

• See page 51 for Waveforms. • See page 56 for IC Pin Function Description.



7-26. PRINTED WIRING BOARD – TRANSFORMER Board –

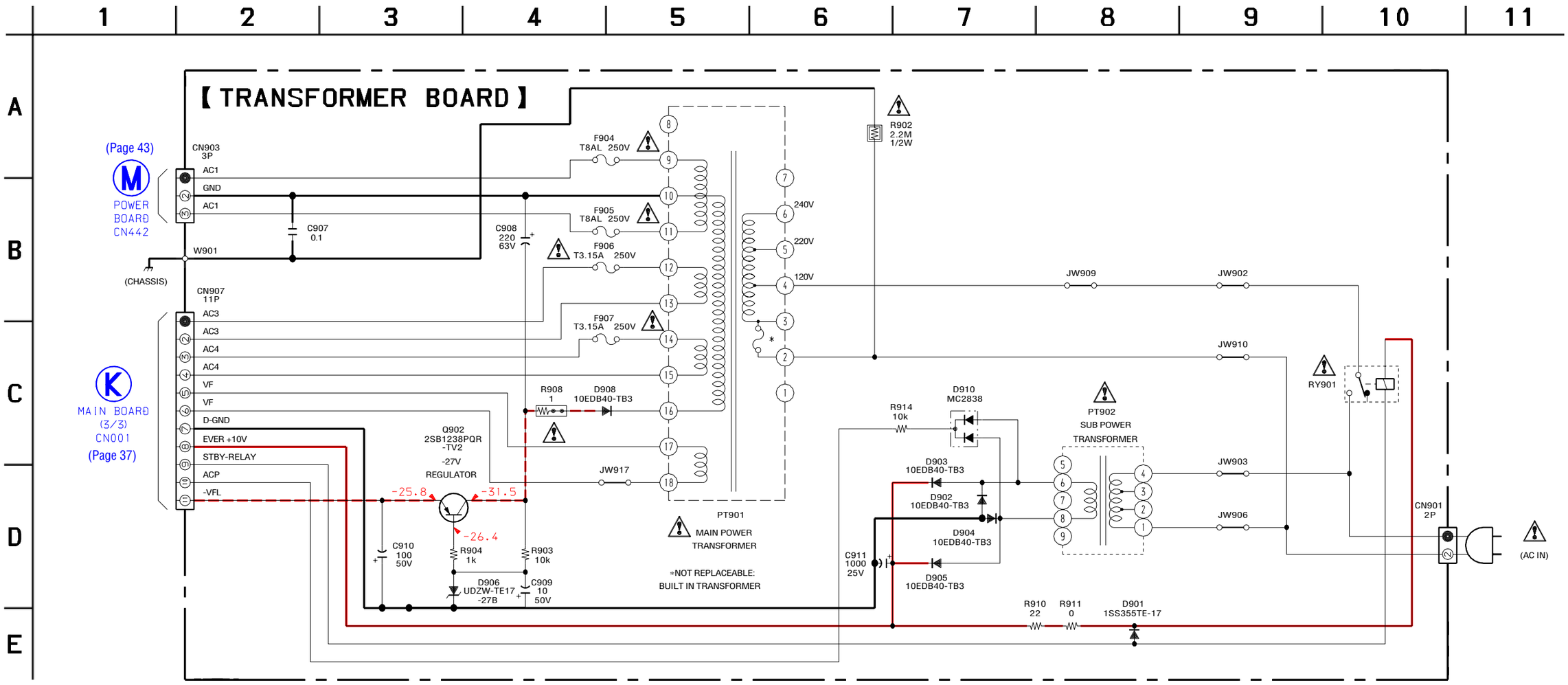
• See page 27 for Circuit Boards Location. : Uses unleaded solder.



• **Semiconductor Location**

Ref. No.	Location
D901	A-8
D902	G-11
D903	G-11
D904	G-11
D905	G-12
D906	B-9
D908	B-8
D910	H-10
Q902	B-9

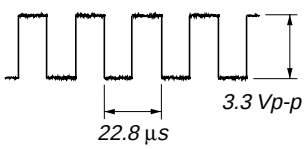
7-27. SCHEMATIC DIAGRAM – TRANSFORMER Board –



• **Waveforms**

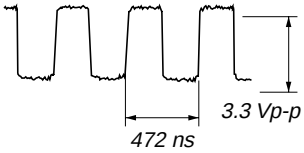
– CD Board –

① IC201 ① (LRCK), ② (LRCKI) (CD play mode)



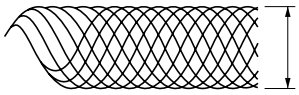
1 V/DIV, 10 µs/DIV

② IC201 ⑤ (BCK), ⑥ (BCKI) (CD play mode)



1 V/DIV, 200 ns/DIV

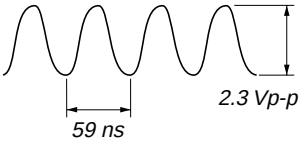
③ IC201 ⑦⓪ (RFACO) (CD play mode)



Approx. 900 mVp-p

200 mV/DIV, 500 ns/DIV

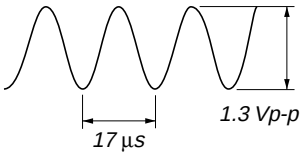
④ IC201 ⑩⑧ (XTAO) (CD play mode)



1 V/DIV, 20 ns/DIV

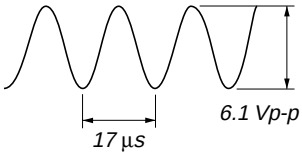
– DECK Board –

㉑ Q453 (Base) (REC mode)



500 mV/DIV, 5 µs/DIV

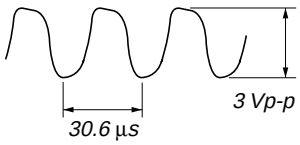
㉒ Q453 (Collector) (REC mode)



2 V/DIV, 5 µs/DIV

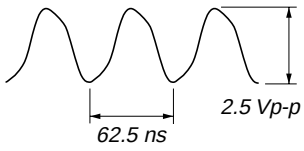
– MAIN Board –

㉛ IC901 ⑪ (XT2 (32.768KHZ))



1 V/DIV, 10 µs/DIV

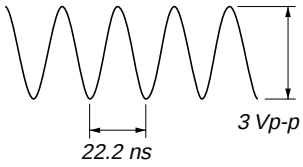
㉜ IC901 ⑭ (X2 (16MHZ))



1 V/DIV, 20 ns/DIV

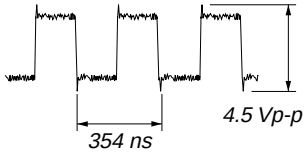
– XM Board –

(51) IC001 ㉖ (OSC_OUT) (XM mode)



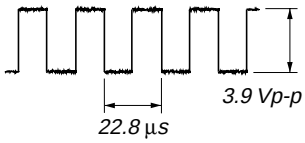
1 V/DIV, 10 ns/DIV

(52) IC001 ㊴ (I2S_CLK) (XM mode)



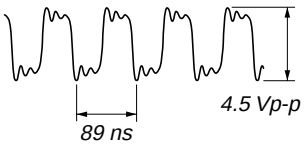
1 V/DIV, 100 ns/DIV

(53) IC001 ㊶ (I2S_LRCLK) (XM mode)



1 V/DIV, 10 µs/DIV

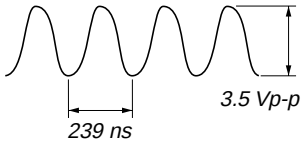
(54) IC001 ㊸ (I2S_OCLK) (XM mode)



1 V/DIV, 50 ns/DIV

– PANEL Board –

(61) IC701 ④ (X2)

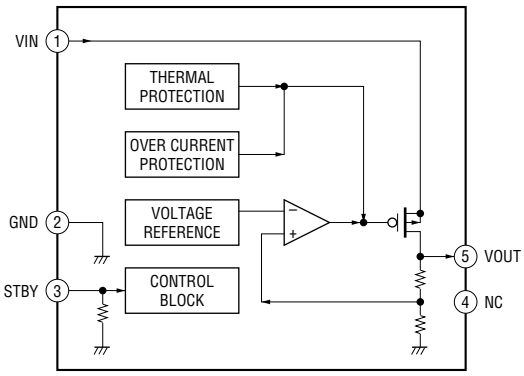


1 V/DIV, 100 ns/DIV

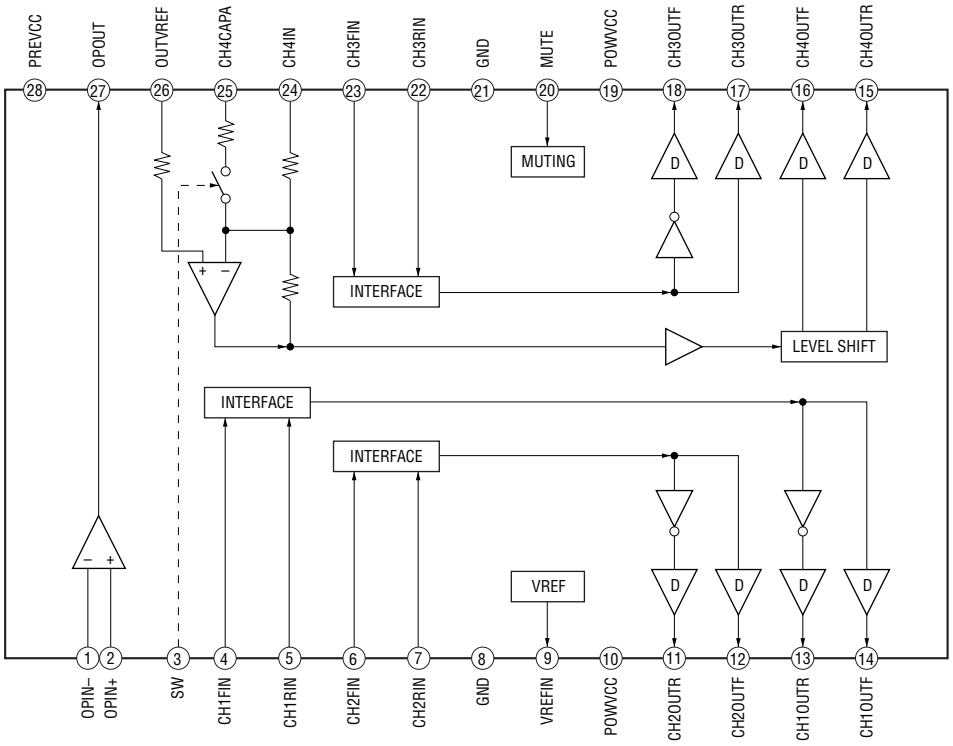
• **IC Block Diagrams**

– CD Board –

IC203 BH18LB1WG-TR

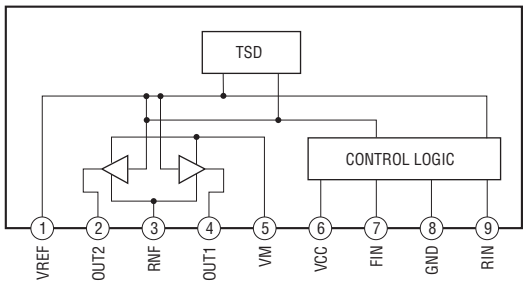


IC402 BA5947FM-E2



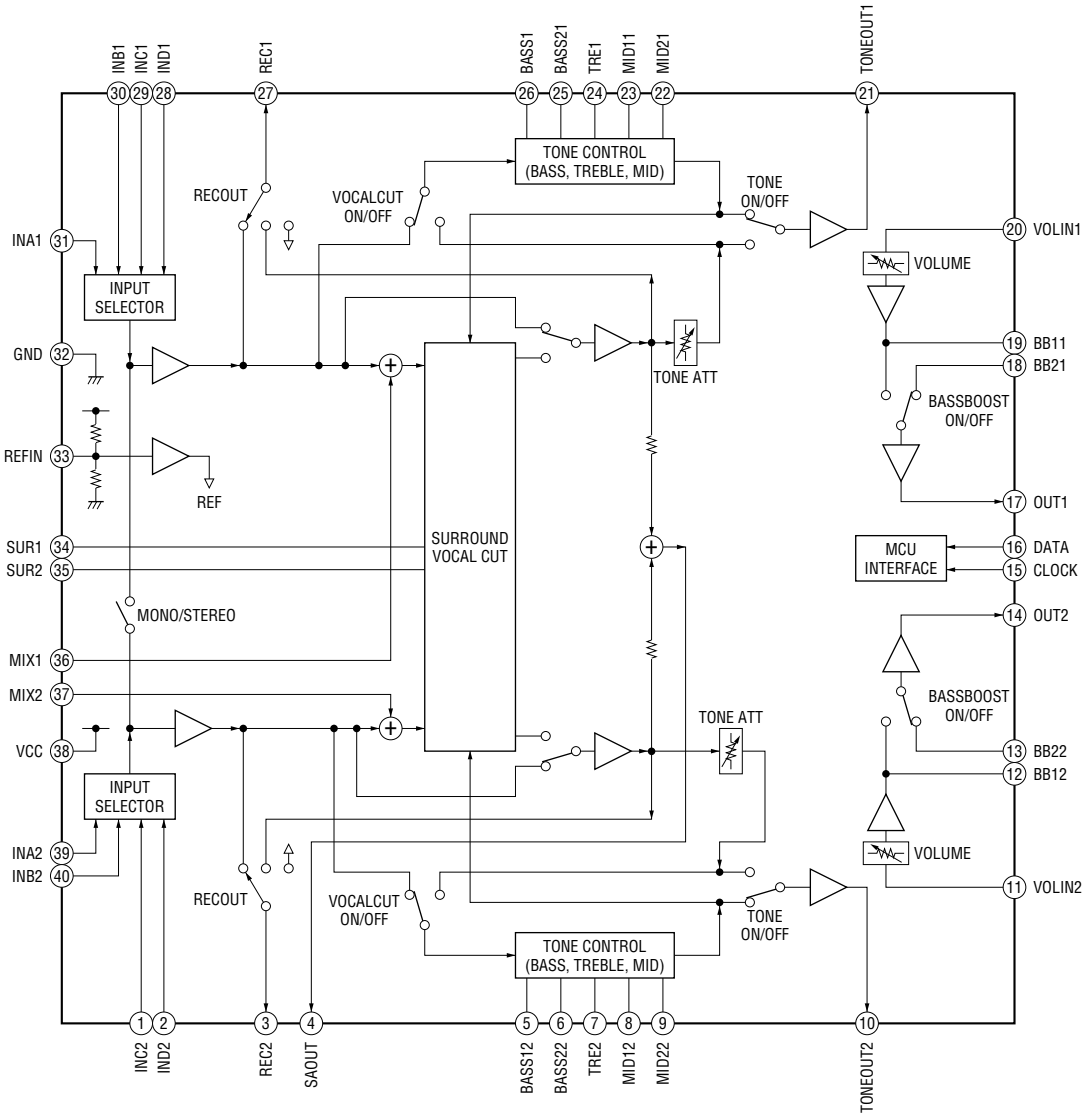
– DRIVER Board –

IC701, 712 BA6956AN

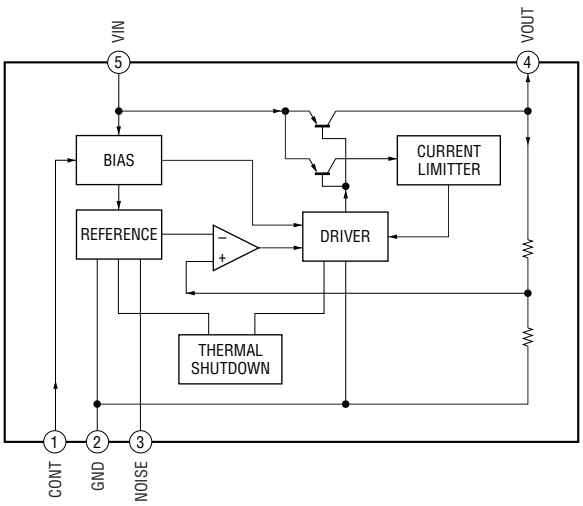


– MAIN Board –

IC101 R2S15207FP

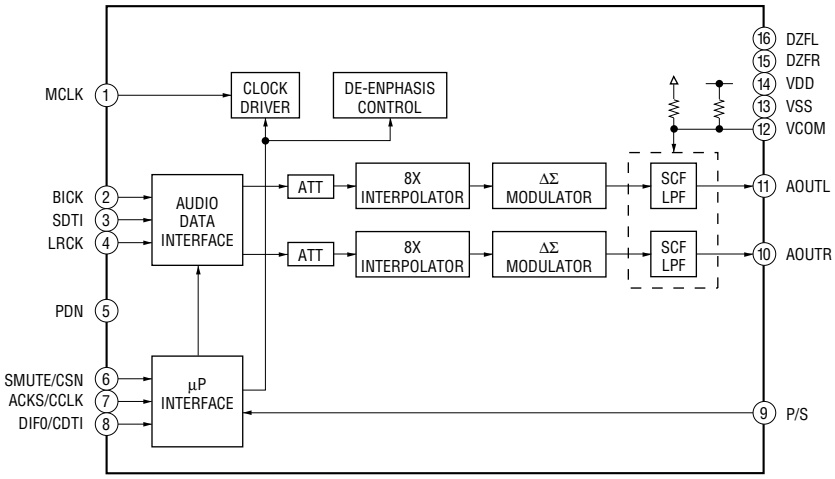


IC301 MM1615ANLE



– XM Board –

IC041 AK4384ET-E2



• **IC Pin Function Description**

CD BOARD IC201 CXD3014A-201R (CD DSP)

Pin No.	Pin Name	I/O	Description
1	LRCK	O	L/R sampling clock signal output terminal
2	LRCKI	I	L/R sampling clock signal input terminal
3	PCMD	O	Serial data output terminal
4	PCMDI	I	Serial data input terminal
5	BCK	O	Bit clock signal output terminal
6	BCKI	I	Bit clock signal input terminal
7	XTACN	I	Oscillation circuit on/off control signal input from the system controller "L": oscillation stop, "H": self-oscillation
8	XRST	I	System reset signal input from the system controller "L": reset
9	VSS	-	Ground terminal
10	IREQ-MP3	O	MP3 data request signal output to the system controller
11	CLOK	I	CD serial data transfer clock signal input from the system controller
12	DATA2	I	MP3 serial data input from the system controller
13	XLAT-MP3	I	MP3 serial data latch pulse signal input from the system controller
14	REQ-MP3	I	MP3 data request signal input from the system controller
15	ACK-MP3	O	MP3 acknowledge signal output to the system controller
16	XLAT	I	CD serial data latch pulse signal input from the system controller
17	VDD	-	Power supply terminal (+1.8V)
18	SVSS	-	Ground terminal
19	SVDD	-	Power supply terminal (+1.8V)
20	SENS	O	Internal status (SENSE) signal output to the system controller
21	WFCK	O	Write frame clock signal output terminal Not used
22	XUGF	O	XUGF signal output terminal Not used
23	XPCK	O	XPCK signal output terminal Not used
24	GFS	O	Guard frame sync signal output terminal Not used
25	C2PO	O	C2 pointer signal output terminal Not used
26	SCOR	O	Subcode sync (S0+S1) detection signal output to the system controller
27	VDD	-	Power supply terminal (+1.8V)
28	COUT	O	Numbers of track counted signal output terminal Not used
29	SVSS	-	Ground terminal
30	SVDD	-	Power supply terminal (+1.8V)
31	MIRR	O	Mirror signal output terminal Not used
32	DFCT	O	Defect signal output terminal Not used
33	FOK	O	Focus OK signal output terminal Not used
34	VSS	-	Ground terminal
35	VDD	-	Power supply terminal (+1.8V)
36	VSS	-	Ground terminal
37	LOCK	O	GFS is sampled by 460 Hz "H" output when GFS is "H" Not used
38	MDP	O	Spindle motor servo control signal output terminal
39	SSTP	I	Disc inner position detection signal input terminal
40	IOVSS1	-	Ground terminal
41	SFDR	O	Sled servo drive signal (+) output terminal
42	SRDR	O	Sled servo drive signal (-) output terminal
43	TFDR	O	Tracking servo drive signal (+) output terminal
44	TRDR	O	Tracking servo drive signal (-) output terminal
45	FFDR	O	Focus servo drive signal (+) output terminal

Pin No.	Pin Name	I/O	Description
46	FRDR	O	Focus servo drive signal (-) output terminal
47	IOVDD1	-	Power supply terminal (+3.3V)
48	AVDD0	-	Power supply terminal (+3.3V)
49	AVSS0	-	Ground terminal
50	E	I	E signal input from the optical pick-up block
51	F	I	F signal input from the optical pick-up block
52	TEI	I	Tracking error signal input terminal
53	TEO	O	Tracking error signal output terminal
54	FEI	I	Focus error signal input terminal
55	FEO	O	Focus error signal output terminal
56	VC	O	Middle point voltage output terminal
57	A	I	A signal input from the optical pick-up block
58	B	I	B signal input from the optical pick-up block
59	C	I	C signal input from the optical pick-up block
60	D	I	D signal input from the optical pick-up block
61	AVDD4	-	Power supply terminal (+3.3V)
62	RFDCO	O	RFDC signal output terminal Not used
63	PDSENS	I	Reference voltage input terminal for PD
64	AC_SUM	O	RFAC summing amplifier signal output terminal
65	EQ_IN	I	RF equalizer circuit input terminal
66	LD	O	Laser diode on/off control signal output to the automatic power control circuit "H": laser diode on
67	PD	I	Light amount monitor input from the laser diode of optical pick-up block
68	RFC	I	Equalizer cut off frequency adjustment terminal
69	AVSS4	-	Ground terminal
70	RFACO	O	EFM signal output terminal
71	RFACI	I	EFM signal input terminal
72	AVDD3	-	Power supply terminal (+3.3V)
73	BIAS	I	Asymmetry circuit constant current input terminal
74	ASYI	I	Playback EFM asymmetry comparator voltage input terminal
75	ASYO	O	Playback EFM full-swing output terminal
76	VPCO	O	Charge pump output terminal for broad-band EFM PLL
77	VCTL	I	VCO2 control voltage input terminal for broad-band EFM PLL
78	AVSS3	-	Ground terminal
79	CLTV	I	VCO1 control voltage input terminal for multiplier
80	FILO	O	Filter output terminal for master PLL
81	FILI	I	Filter input terminal for master PLL
82	PCO	O	Charge pump output terminal for master PLL
83	SVSS	-	Ground terminal
84	SVDD	-	Power supply terminal (+1.8V)
85	SSTB-MP3	I	MP3 standby on/off control signal input terminal "L": standby Not used
86	VDD	-	Power supply terminal (+1.8V)
87	VSS	-	Ground terminal
88	TEST1	I	Input terminal for the test Normally: fixed at "L"
89	DATA	I	CD serial data input from the system controller
90	CLK2	I	MP3 serial data transfer clock signal input from the system controller
91	SVSS	-	Ground terminal

Pin No.	Pin Name	I/O	Description
92	SVDD	-	Power supply terminal (+2.5V)
93	JTAGTCK	I	Clock signal input terminal (for JTAG) Not used
94	JTAGTDI	I	Data input terminal (for JTAG) Not used
95	JTAGTDO	O	Data output terminal (for JTAG) Not used
96	JTAGTMS	I	Mode select signal input terminal (for JTAG) Not used
97	TRST	I	Reset signal input terminal (for JTAG) Not used
98	VSS	-	Ground terminal
99	VDD	-	Power supply terminal (+1.8V)
100	IOVDD2	-	Power supply terminal (+3.3V)
101	DOUT	O	Digital audio signal output terminal Not used
102	TEST	I	Input terminal for the test Normally: fixed at "L"
103	TES1	I	Input terminal for the test Normally: fixed at "L"
104	IOVSS2	-	Ground terminal
105	PLLVDD	-	Power supply terminal (+1.8V)
106	PLLVSS	-	Ground terminal
107	XVSS	-	Ground terminal
108	XTAO	O	System clock output terminal (16.9344 MHz)
109	XTAI	I	System clock input terminal (16.9344 MHz)
110	XVDD	-	Power supply terminal (+1.8V)
111	AVDD1	-	Power supply terminal (+3.3V)
112	AOUT1	O	L-ch analog audio signal output terminal
113	VREFL	O	L-ch reference voltage output terminal
114	AVSS1	-	Ground terminal
115	AVSS2	-	Ground terminal
116	VREFR	O	R-ch reference voltage output terminal
117	AOUT2	O	R-ch analog audio signal output terminal
118	AVDD2	-	Power supply terminal (+3.3V)
119	IOVDD0	-	Power supply terminal (+3.3V)
120	IOVSS0	-	Ground terminal

MAIN BOARD IC901 uPD78F0547GC (S)-UBT-A (SYSTEM CONTROLLER)

Pin No.	Pin Name	I/O	Description
1	I-AC-PULSE	I	AC power detection signal input terminal
2	O-REC/PB	O	Recording/playback selection signal output terminal "L": playback, "H": recording
3	O-REC-MUTE	O	Recording muting on/off control signal output terminal "L": muting on
4	O-BIAS	O	Recording bias on/off control signal output terminal "H": bias on
5	O-STK-MUTE	O	Standby signal output to the power amplifier (for front speaker)
6	O-SW_GAIN	O	Sub woofer gain control signal output terminal Not used
7	O-POWER-RELAY	O	Power on/off relay drive signal output terminal "H": power on
8	O-XM-POWER3.3	O	Power on/off control signal output terminal for XM section (GX570)
9	I-AC-CUT	I	AC power off detection signal input terminal
10	I-XRESET	I	System reset signal input from the reset signal generator "L": reset For several hundreds msec. after the power supply rises, "L" is input, then it changes to "H"
11	XT2 (32.768KHZ)	O	Sub system clock output terminal (32.768 kHz)
12	XT1 (32.768KHZ)	I	Sub system clock input terminal (32.768 kHz)
13	FLMDO	I	Internal flash memory data writing mode control signal input terminal
14	X2 (16MHZ)	O	Main system clock output terminal (16 MHz)
15	X1 (16MHZ)	I	Main system clock input terminal (16 MHz)
16	REGC	-	External capacitor connection terminal for regulator
17	VSS	-	Ground terminal
18	EVSS	-	Ground terminal
19	VDD	-	Power supply terminal (+3.3V)
20	EVDD	-	Power supply terminal (+3.3V)
21	O-SYS-MUTE	O	Muting on/off control signal output terminal "L": muting on
22	O-SWR	O	Sub woofer speaker on/off relay drive signal output terminal "L": sub woofer speaker on
23	O-FRONT-SP-RELAY	O	Front speaker on/off relay drive signal output terminal "H": front speaker on
24	O-XTCN	O	Oscillation circuit on/off control signal output to the CD DSP "L": oscillation stop, "H": self-oscillation
25	O-MP3-RST	O	System reset signal output terminal "L": reset Not used
26	O-MP3-XLAT/ O-MP3-CS	O	MP3 serial data latch pulse signal output to the CD DSP
27	I-MP3-ACK	I	MP3 acknowledge signal input from the CD DSP
28	O-XLAT/ O-MP3-STB	O	CD serial data latch pulse signal output to the CD DSP
29	I-MP3-REQ	I	MP3 data request signal input from the CD DSP
30	O-MP3-CS/ O-MP3-LP	O	MP3 data request signal output to the CD DSP
31	O-D-MUTE/ O-XLT	O	System reset signal output to the motor/coil driver "L": reset
32	O-XRST	O	System reset signal output to the CD DSP "L": reset
33	O-LM-R	O	Loading motor control signal output terminal (reverse direction)
34	O-LM-F	O	Loading motor control signal output terminal (forward direction)
35	O-TM-R	O	Table motor control signal output terminal (reverse direction)
36	O-TM-F	O	Table motor control signal output terminal (forward direction)
37	I-CD-NUMBER-SENS	I	Disc table address sensor input terminal
38	I-OPEN-SW	I	Disc table open/close detection switch input terminal "L": open, "H": close
39	I-XTUNED	I	Tuning detection signal input terminal Not used

Pin No.	Pin Name	I/O	Description
40	I-SCOR	I	Subcode sync (S0+S1) detection signal input from the CD DSP
41	I-XM-IRQ	I	Interrupt request signal input from the XM receiver (GX570)
42	O-LC23003-CE	O	Chip enable signal output to the tuner (FM/AM)
43	O-LC23003-DO	O	Serial data output to the tuner (FM/AM)
44	O-LC23003-CLK	O	Serial data transfer clock signal output to the tuner (FM/AM)
45	I-LC23003-DI	I	Serial data input from the tuner (FM/AM)
46	O-XM-DTIC-RESET	O	Reset signal output to the XM receiver (GX570)
47	O-XM-POWER	O	Power on/off control signal output terminal for XM section (GX570)
48	O-XM-MUTE	O	Muting control signal output terminal for XM section (GX570)
49	O-XM-DTIC-CMD	O	Command mode select signal output to the XM receiver (GX570)
50	I-XM-RXD	I	Receive data input from the XM receiver (GX570)
51	O-XM-TXD	O	Transmit data output to the XM receiver (GX570)
52	O-CD-DATA	O	CD serial data output to the CD DSP
53	I-CD-SENS	I	Internal status (SENSE) signal input from the CD DSP
54	O-CD-CLK	O	CD serial data transfer clock signal output to the CD DSP
55	I-MIC-DET	I	Microphone plug insert detection signal input terminal "L": microphone plug insert Not used
56	O-R2S15208SP-DATA	O	Serial data output terminal Not used
57	O-AUDIO-CLK	O	Serial data transfer clock signal output to the electrical volume
58	O-R2S15207FP-DATA	O	Serial data output to the electrical volume
59	AVREF	I	Reference voltage (+3.3V) input terminal
60	AVSS	-	Ground terminal
61	I-HP/AUDIO IN	I	Headphone plug and audio in plug insert detection signal input terminal "L": headphone plug or audio in plug insert
62	I-SUFFIX	I	Setting terminal for the model and destination
63	I-VACS	I	VACS signal input terminal (A/D input)
64	I-PROTECTOR	I	Protector detection signal input terminal
65	I-KEY0	I	Front panel key input terminal (A/D input)
66	I-CD-ENCODER	I	Disc table address sensor (rotary encoder) input terminal
67	I-MODEL	I	Setting terminal for the model and destination
68	I-STREAM	I	Audio signal input for stream LED (A/D input) Not used
69	O-STBY-LED	O	LED drive signal output terminal for STANDBY indicator "H": LED on
70	O-MP3-CLK	O	MP3 serial data transfer clock signal output to the CD DSP
71	I-MP3-DATA	I	MP3 serial data input terminal
72	O-MP3-DATA	O	MP3 serial data output to the CD DSP
73	I-TCM-SYNC	I	Sync signal input from the tape mechanism deck controller
74	O-VFD-RESET	O	System reset signal output to the fluorescent indicator tube/LED driver "L": reset
75	O-VFD-CE	O	Chip enable signal output to the fluorescent indicator tube/LED driver
76	O-VFD-DATA	O	Serial data output to the fluorescent indicator tube/LED driver
77	I-VFD-DATA	I	Serial data input from the fluorescent indicator tube/LED driver
78	O-VFD-CLK	O	Serial data transfer clock signal output to the fluorescent indicator tube/LED driver
79	I-WAKEUP	I	Wake up signal input terminal
80	I-XSIRCS-IN	I	SIRCS signal input from the remote control receiver

PANEL BOARD IC701 uPD780232GC-509-8BT-A
(FLUORESCENT INDICATOR TUBE/LED DRIVER, TAPE MECHANISM DECK CONTROLLER)

Pin No.	Pin Name	I/O	Description
1	VDD1	-	Power supply terminal (+3.3V)
2	VSS1	-	Ground terminal
3	X1	I	System clock input terminal (4.19 MHz)
4	X2	O	System clock output terminal (4.19 MHz)
5	IC	I	Input terminal for the IC test Normally: fixed at "L"
6	XRESET	I	System reset signal input from the system controller "L": reset
7	SCK1	I	Serial data transfer clock signal input from the system controller
8	SI1	I	Serial data input from the system controller
9	SO1	O	Serial data output to the system controller
10	I-VOL A	I	Jog dial pulse input from the rotary encoder (VOLUME) (A phase input)
11	I-VOL B	I	Jog dial pulse input from the rotary encoder (VOLUME) (B phase input)
12	I-JOG A	I	Jog dial pulse input from the rotary encoder (multi jog) (A phase input)
13	I-JOG A	I	Jog dial pulse input from the rotary encoder (multi jog) (B phase input)
14, 15	NC	I	Not used
16	CE	I	Chip select signal input from the system controller
17	I-MODEL	I	Destination setting terminal
18	AVSS	-	Ground terminal
19 to 22	KEY1 to KEY4	I	Front panel key input terminal (A/D input)
23	VSS0	-	Ground terminal
24	AVDD	-	Power supply terminal (+5V)
25	VDD0	-	Power supply terminal (+5V)
26	NC	I	Not used
27	I-HALF-B	I	Deck-B cassette detection signal input from the tape mechanism deck block "L": cassette in
28	I-REEL-B	I	Deck-B tape reel rotating detection signal input from the tape mechanism deck block
29	I-REC-SW	I	Recording-proof detection signal input from the tape mechanism deck block "L": recording possible
30	I-HALF-A	I	Deck-A cassette detection signal input from the tape mechanism deck block "L": cassette in
31	I-REEL-A	I	Deck-A tape reel rotating detection signal input from the tape mechanism deck block
32	NC	I	Not used
33	O-MOTOR	O	Capstan/reel motor drive signal output terminal "H": motor on
34	O-SOL-A	O	Deck-A side trigger plunger drive signal output terminal "H": plunger on
35	O-SOL-B	O	Deck-B side trigger plunger drive signal output terminal "H": plunger on
36	O-TCM-SYNC	O	Sync signal output to the system controller
37	SW LED	O	LED rive signal output of the SUBWOOFER indicator "H": LED on
38	NC	I	Not used
39 to 43	STREAM LED1 to STREAM LED5	O	LED rive signal output terminal "H": LED on Not used
44	NC	I	Not used
45 to 58	S1 to S14	O	Segment drive signal output to the fluorescent indicator tube
59	VDD2	-	Power supply terminal (+5V)
60	VLOD	-	Power supply terminal (-27V)
61 to 67	S15 to S21	O	Segment drive signal output to the fluorescent indicator tube
68 to 80	G13 to G11	O	Grid drive signal output to the fluorescent indicator tube

XM BOARD IC001 F2602E-01-TR (XM RECEIVER) (GX570)

Pin No.	Pin Name	I/O	Description
1	LSDP_TXRX	-	Not used
2	VSS	-	Ground terminal
3	SC_XT_OUT	O	Serial data output to the system controller
4	VDD	-	Power supply terminal (+3.3V)
5	SC_RX_IN	I	Serial data input from the system controller
6	VSS	-	Ground terminal
7	CDM_SEL	I	Command mode select signal input from the system controller
8	VDD	-	Power supply terminal (+3.3V)
9	ERR_IRQ#	O	Interrupt request signal output to the system controller
10	VSS	-	Ground terminal
11	RST#	I	Reset signal input from the system controller
12	SLAVE_SET	I	Master/slave mode setting terminal "L": Master mode, "H": Slave mode Fixed at "L" in this set
13	COMM_RX_DIG	-	Not used
14	COMM_TX_DIG	-	Not used
15	COMM_TX_EN	-	Not used
16	VSS	-	Ground terminal
17	VDD	-	Power supply terminal (+3.3V)
18	CDMM_RX_P	I	XM receiver differential signal (positive) input terminal
19	CDMM_RX_M	I	XM receiver differential signal (negative) input terminal
20	VDD	-	Power supply terminal (+3.3V)
21	VSS	-	Ground terminal
22	CDMM_TX_M	O	XM transmitter differential signal (negative) output terminal
23	CDMM_TX_P	O	XM transmitter differential signal (positive) output terminal
24, 25	VSS	-	Ground terminal
26	OSC_OUT	O	System clock output terminal (45.158 MHz)
27	VSS	-	Ground terminal
28	OSC_IN	I	System clock input terminal (45.158 MHz)
29	VSS	-	Ground terminal
30	TEST	-	Not used
31	VSS	-	Ground terminal
32	HSDP_DATA	-	Not used
33	VSS	-	Ground terminal
34	HSDP_CLK	-	Not used
35	VDD	-	Power supply terminal (+3.3V)
36	HSDP_EN	-	Not used
37	I2S_DA	O	I2S digital audio data output terminal
38	VSS	-	Ground terminal
39	I2S_CLK	O	I2S bit clock signal output terminal
40	VDD	-	Power supply terminal (+3.3V)
41	I2S_LRCLK	O	I2S L/R sampling clock signal output terminal
42	VSS	-	Ground terminal
43	I2S_OCLK	O	I2S over sample clock signal output terminal
44	VSS	-	Ground terminal
45	SAII_CLK	-	Not used
46	VDD	-	Power supply terminal (+3.3V)
47	SAII_DA	-	Not used
48	SAII_EN	-	Not used

SECTION 8
EXPLODED VIEWS

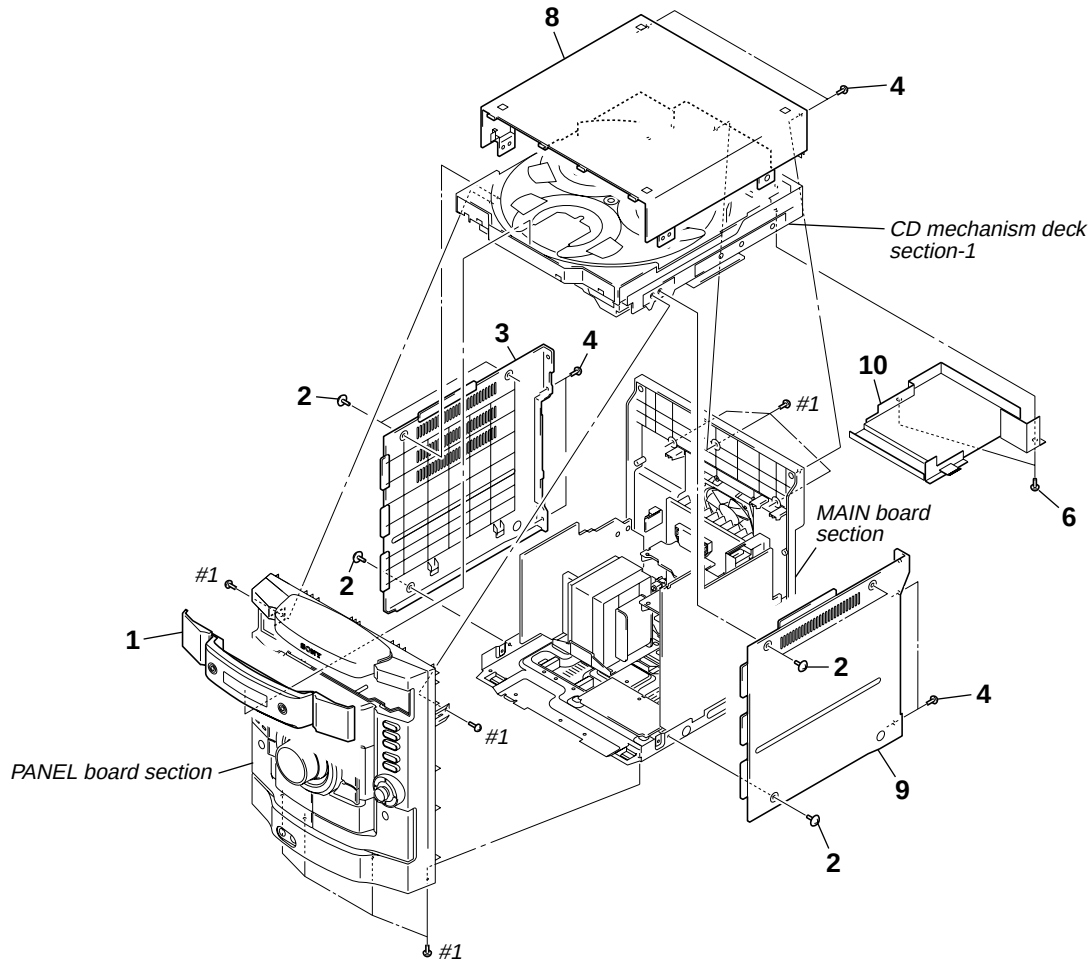
NOTE:

- -XX and -X mean standardized parts, so they may have some difference from the original one.
- Color Indication of Appearance Parts
  Example:
  KNOB, BALANCE (WHITE) . . . (RED)
  ↑ ↑
  Parts Color Cabinet's Color
- Abbreviation
  CND : Canadian model
- Items marked "*" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- The mechanical parts with no reference number in the exploded views are not supplied.
- Accessories are given in the last of the electrical parts list.

The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

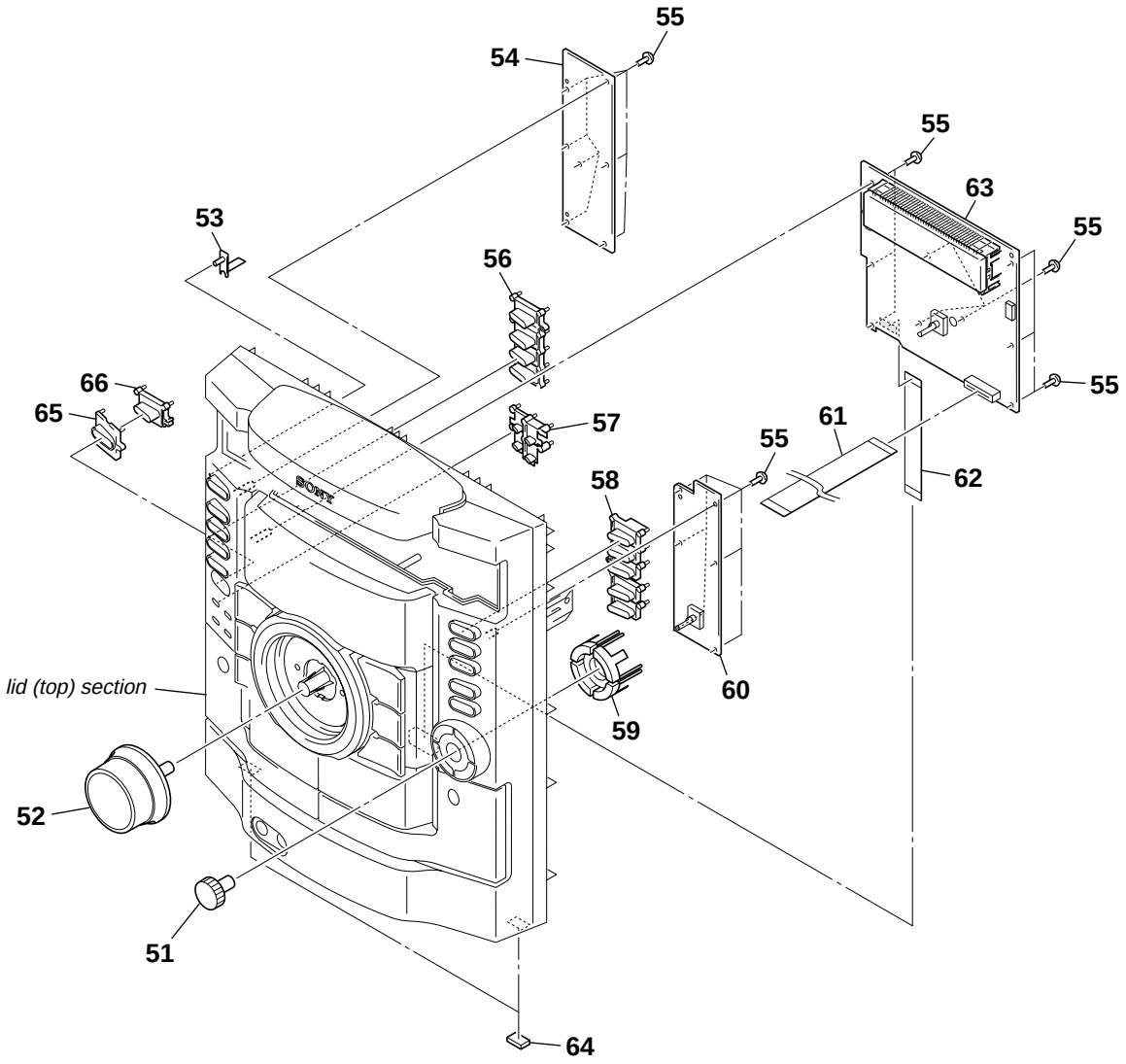
Les composants identifiés par une marque ⚠ sont critiquens pour la sécurité.
Ne les remplacer que par une pièce portant le numéro spécifié.

8-1. CASE SECTION



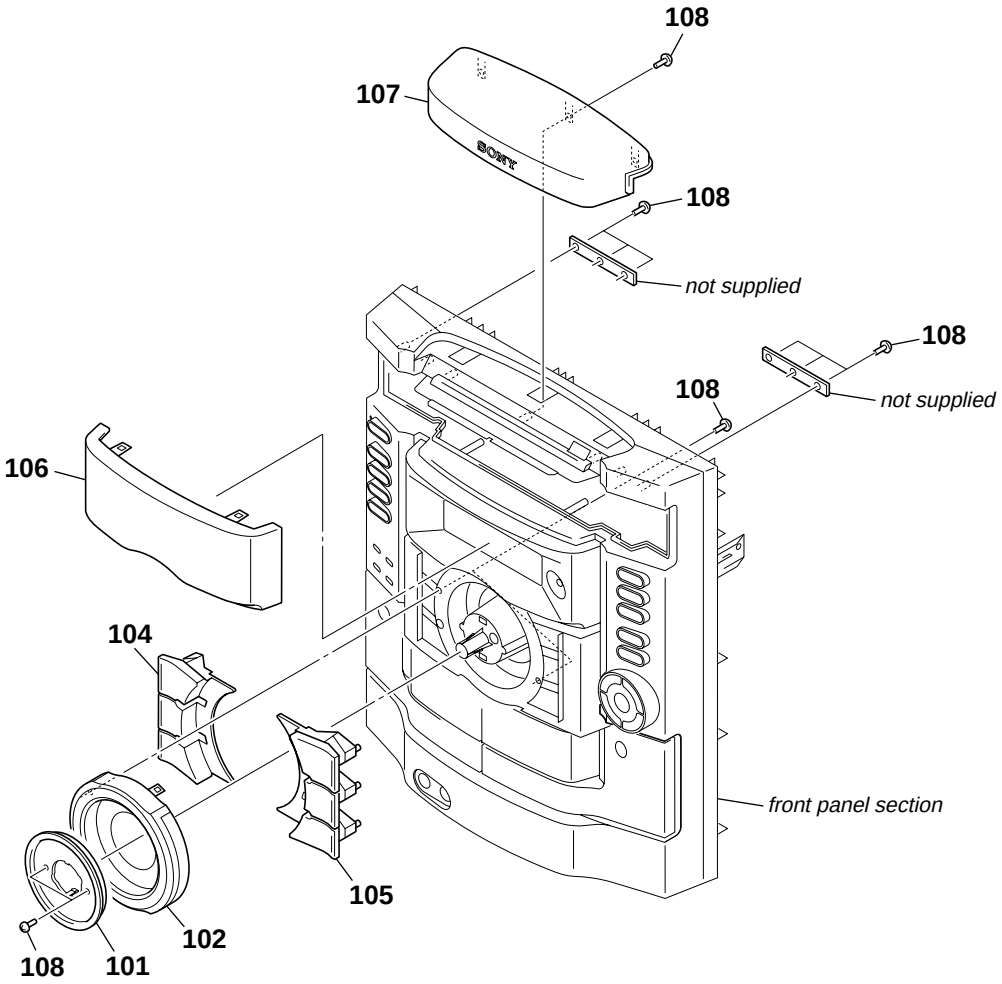
Ref. No.	Part No.	Description	Remark
1	2-658-299-61	LID (CD) (GX470)	
1	2-658-299-71	LID (CD) (GX570)	
2	3-363-099-32	SCREW (CASE 3 TP2)	
3	2-599-855-01	CASE (SIDE-L) (GX470: US/GX570: US)	
3	2-599-855-11	CASE (SIDE-L) (GX470: CND/GX570: CND)	
4	3-254-143-11	SCREW (B3), (+) BV TAPPING	
6	4-951-620-01	SCREW (2.6X8), +BVTP	
8	2-599-854-01	CASE (TOP) (GX470: US/GX570: US)	
8	2-599-854-11	CASE (TOP) (GX470: CND/GX570: CND)	
9	2-599-856-01	CASE (SIDE-R) (GX470: US/GX570: US)	
9	2-599-856-11	CASE (SIDE-R) (GX470: CND/GX570: CND)	
10	2-675-793-01	COVER (OP)	
#1	7-685-646-79	SCREW +BVTP 3X8 TYPE2 IT-S	

8-2. PANEL BOARD SECTION



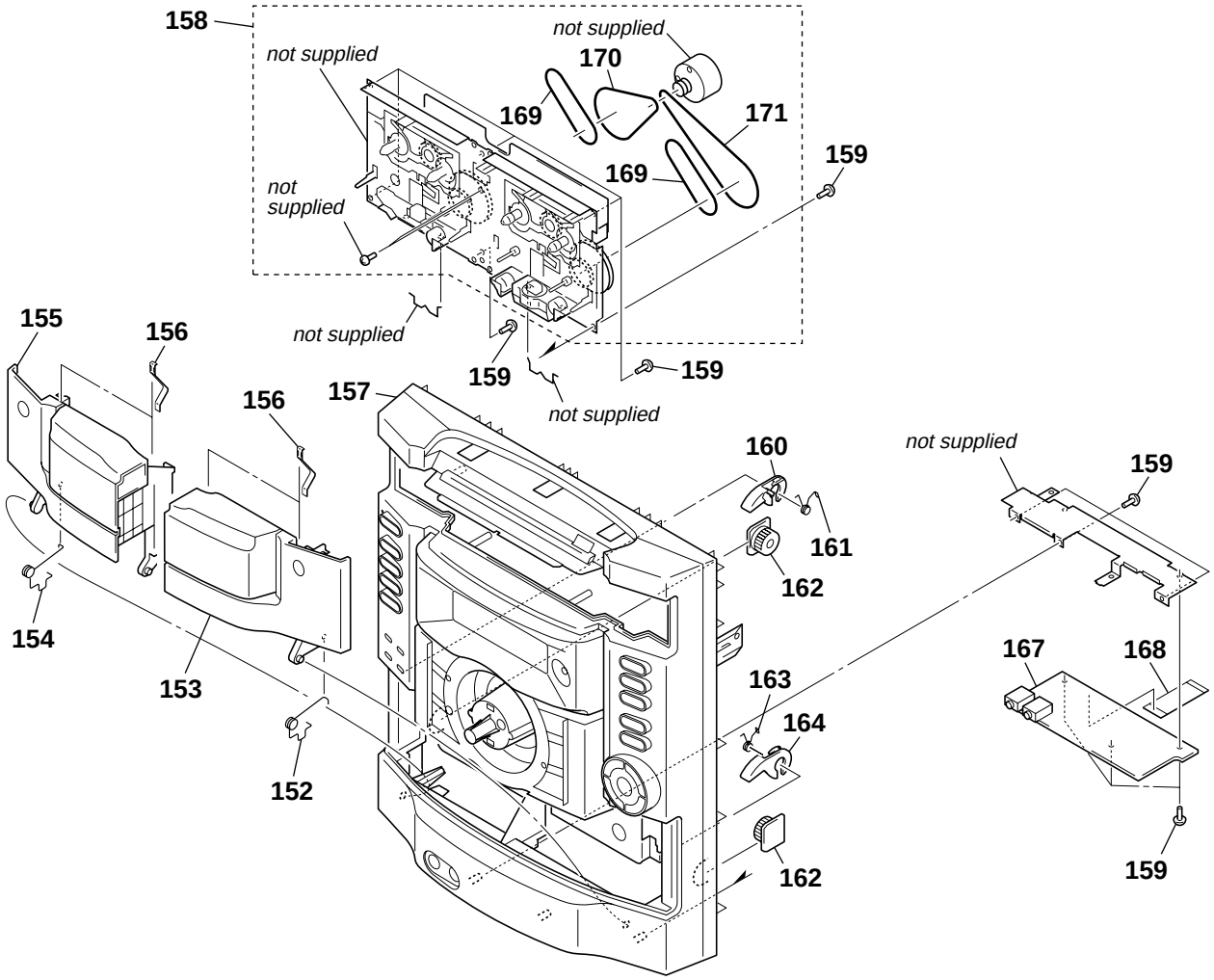
Ref. No.	Part No.	Description	Remark
51	2-658-294-11	KNOB (JOG)	
52	2-658-293-01	KNOB (VOL B)	
53	2-658-279-01	INDICATOR (POWER)	
54	A-1159-677-A	KEY LEFT BOARD, COMPLETE	
55	4-951-620-01	SCREW (2.6X8), +BVTP	
56	2-658-275-01	KEY (POWER) (I/⏻, CD, TUNER/BAND, TAPE A/B, AUDIO IN)	
57	2-658-274-01	KEY (REC)	
58	2-658-276-01	KEY (CD) (DISC 1, DISC 2, DISC 3, DISC SKIP/EX-CHANGE, ⏏)	
59	2-658-281-01	KEY (JOG) (GROOVE, SURROUND, ENTER, EQ BAND)	
60	A-1159-681-A	KEY RIGHT BOARD, COMPLETE	
61	1-831-952-21	CABLE, FLEXIBLE FLAT (19 CORE)	
62	1-831-779-21	CABLE, FLEXIBLE FLAT (11 CORE)	
63	A-1163-173-A	PANEL BOARD, COMPLETE	
64	4-225-252-01	CUSHION (FOOT)	
65	2-658-277-01	RING (SUB WOOFER)	
66	2-658-278-01	KEY (SUB WOOFER)	

8-3. LID (TOP) SECTION



Ref. No.	Part No.	Description	Remark
101	2-658-285-12	REFLECTOR (VOL)	
102	X-2109-227-1	RING (VOL) ASSY (SERVICE)	
104	2-658-286-01	KEY (CENTER L) (▷II, I◁◁ TUNING –, ◁◁ 🗀 –) (GX470)	
104	2-658-286-11	KEY (CENTER L) (▷II, I◁◁ TUNING –, ◁◁ 🗀 –, CATEGORY –) (GX570)	
105	2-658-287-01	KEY (CENTER R) (□, ▷▷I TUNING +, ▷▷ 🗀 +) (GX470)	
105	2-658-287-11	KEY (CENTER R) (□, ▷▷I TUNING +, ▷▷ 🗀 +, CATEGORY +) (GX570)	
106	2-658-283-51	WINDOW (DISPLAY) (GX570)	
106	2-664-867-01	WINDOW (DISPLAY) (GX470)	
107	X-2109-229-1	LID (TOP B) ASSY (SERVICE) (GX570)	
107	X-2109-230-1	LID (TOP B) ASSY (SERVICE) (GX470)	
108	4-951-620-01	SCREW (2.6X8), +BVTP	

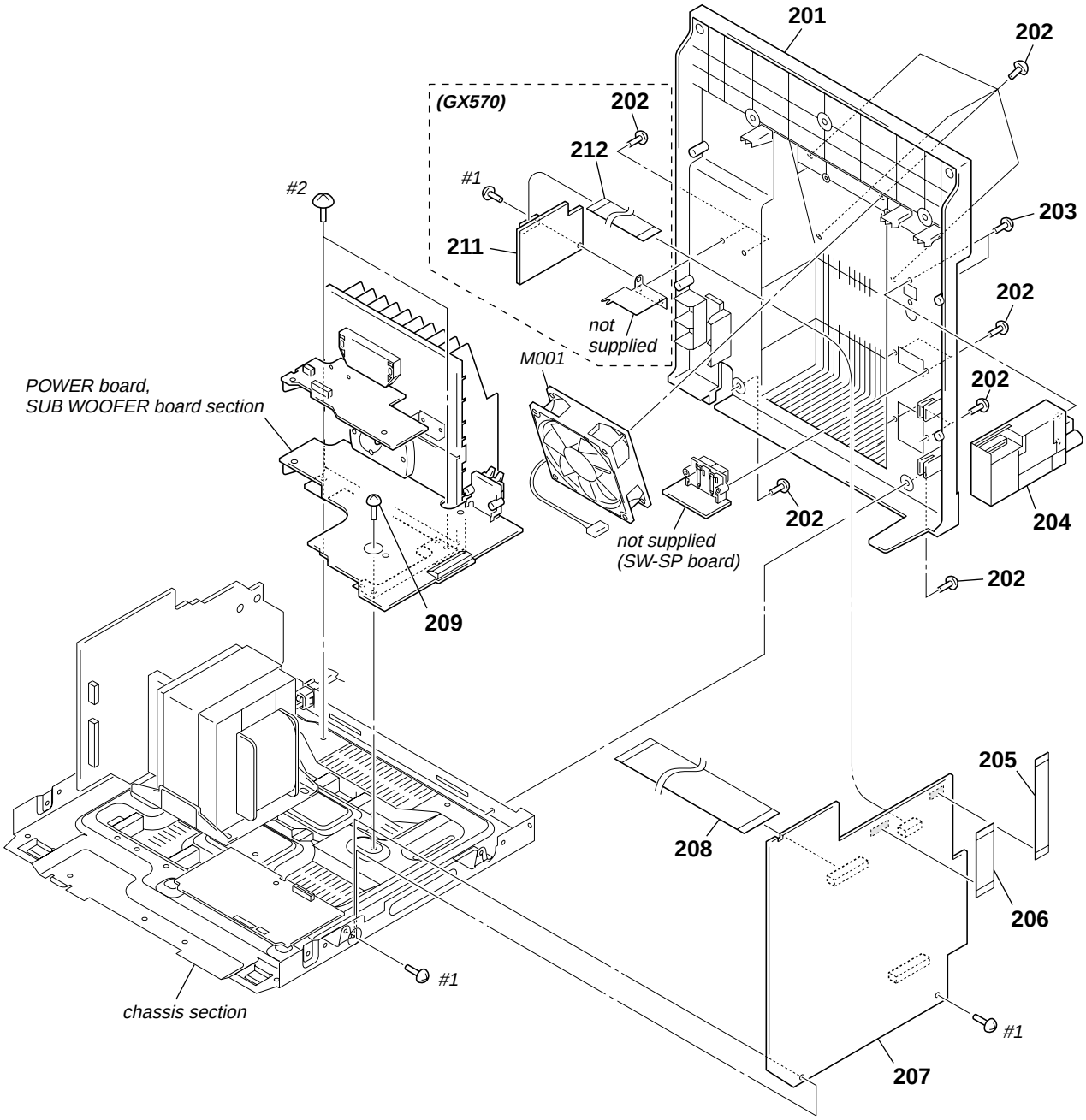
8-4. FRONT PANEL SECTION



Ref. No.	Part No.	Description	Remark
152	2-658-304-01	SPRING (CASS R)	
153	2-658-271-01	BOX, CASSETTE (R) (GX570)	
153	2-658-271-11	BOX, CASSETTE (R) (GX470)	
154	2-658-303-01	SPRING (CASS L)	
155	2-658-270-11	BOX, CASSETTE (L) (GX570)	
155	2-658-270-21	BOX, CASSETTE (L) (GX470)	
156	4-238-631-11	TAPE SPRING	
157	X-2109-216-1	PANEL (SERVICE) ASSY, FRONT (GX570: US)	
157	X-2109-223-1	PANEL (SERVICE) ASSY, FRONT(GX570: CND)	
157	X-2109-224-1	PANEL (SERVICE) ASSY, FRONT (GX470: US)	
157	X-2109-225-1	PANEL (SERVICE) ASSY, FRONT (GX470: CND)	
158	1-417-656-21	MECHA DECK (CWN42FF609)	

Ref. No.	Part No.	Description	Remark
159	4-951-620-01	SCREW (2.6X8), +BVTP	
160	4-231-825-01	CAM (B), HEART	
161	4-231-841-01	SPRING (HEART CAM-B)	
162	4-224-104-41	DAMPER	
163	4-231-836-01	SPRING (HEART CAM-A)	
164	4-231-824-01	CAM (A), HEART	
167	A-1159-739-A	MIC. AUX. HP BOARD, COMPLETE	
168	1-831-772-21	CABLE, FLEXIBLE FLAT (9 CORE)	
169	4-235-777-01	BELT (FR)	
170	2-683-559-01	BELT (AF)	
171	4-683-560-01	BELT (BF)	

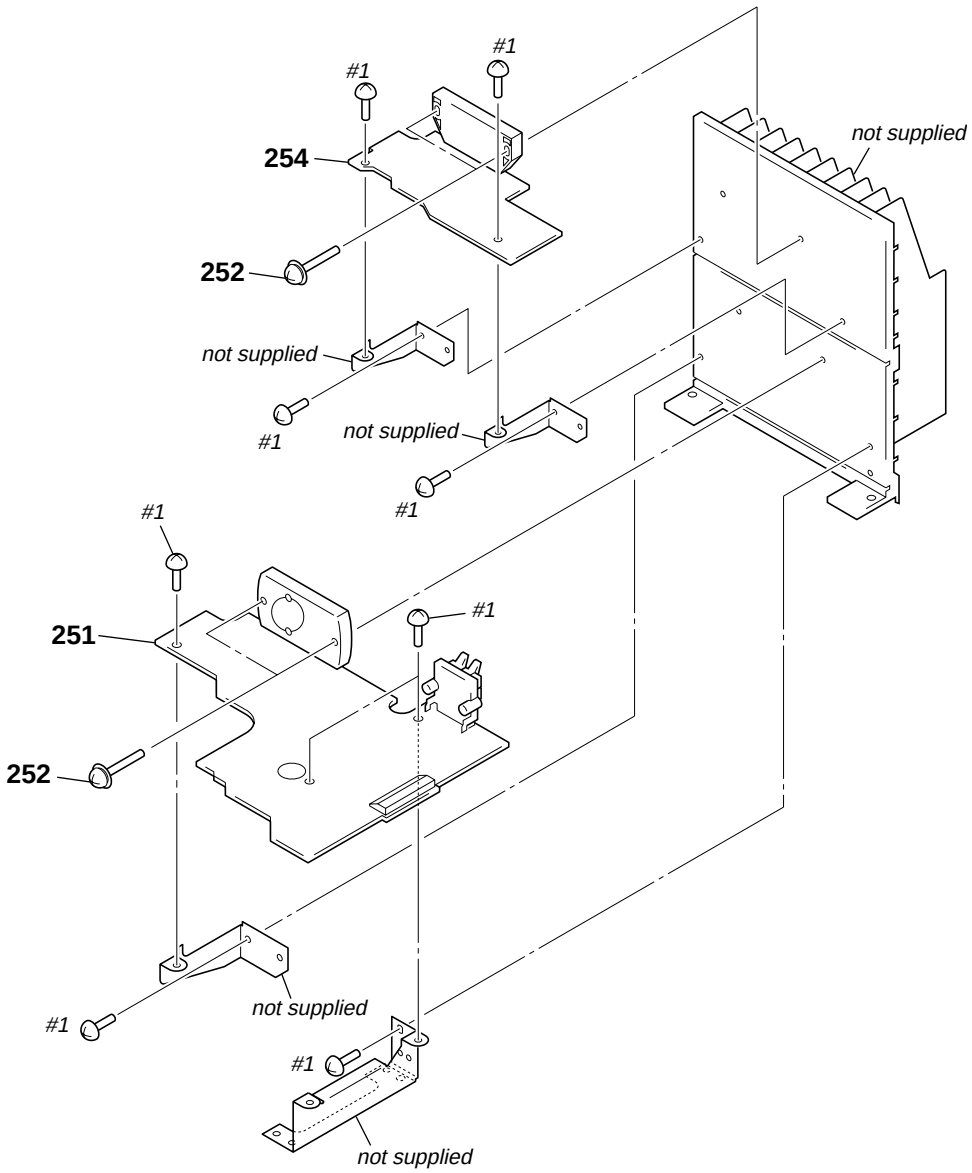
8-5. MAIN BOARD SECTION



Ref. No.	Part No.	Description	Remark
201	2-658-298-51	PANEL, BACK (GX470: CND)	
201	2-664-764-11	PANEL, BACK (GX570: US)	
201	2-664-764-21	PANEL, BACK (GX470: US)	
201	2-664-764-71	PANEL, BACK (GX570: CND)	
202	3-254-143-11	SCREW (B3), (+) BV TAPPING	
203	3-252-829-01	SCREW (B3), (+) BV TAPPING	
204	1-693-713-11	TUNER (FM/AM)	
205	1-831-769-21	CABLE, FLEXIBLE FLAT (9 CORE)	
206	1-831-786-21	CABLE, FLEXIBLE FLAT (13 CORE)	

Ref. No.	Part No.	Description	Remark
207	A-1163-189-A	MAIN BOARD, COMPLETE (GX570)	
207	A-1163-190-A	MAIN BOARD, COMPLETE (GX470)	
208	1-831-771-21	CABLE, FLEXIBLE FLAT (23 CORE)	
209	3-077-331-01	+BV3 (3-CR)	
211	A-1167-407-A	XM BOARD, COMPLETE (GX570)	
212	1-832-848-21	WIRE (FLAT TYPE) (15 CORE) (GX570)	
M001	1-787-344-11	FAN, DC	
#1	7-685-646-79	SCREW +BVTP 3X8 TYPE2 IT-3	
#2	7-685-881-09	SCREW +BVTT 4X8 (S)	

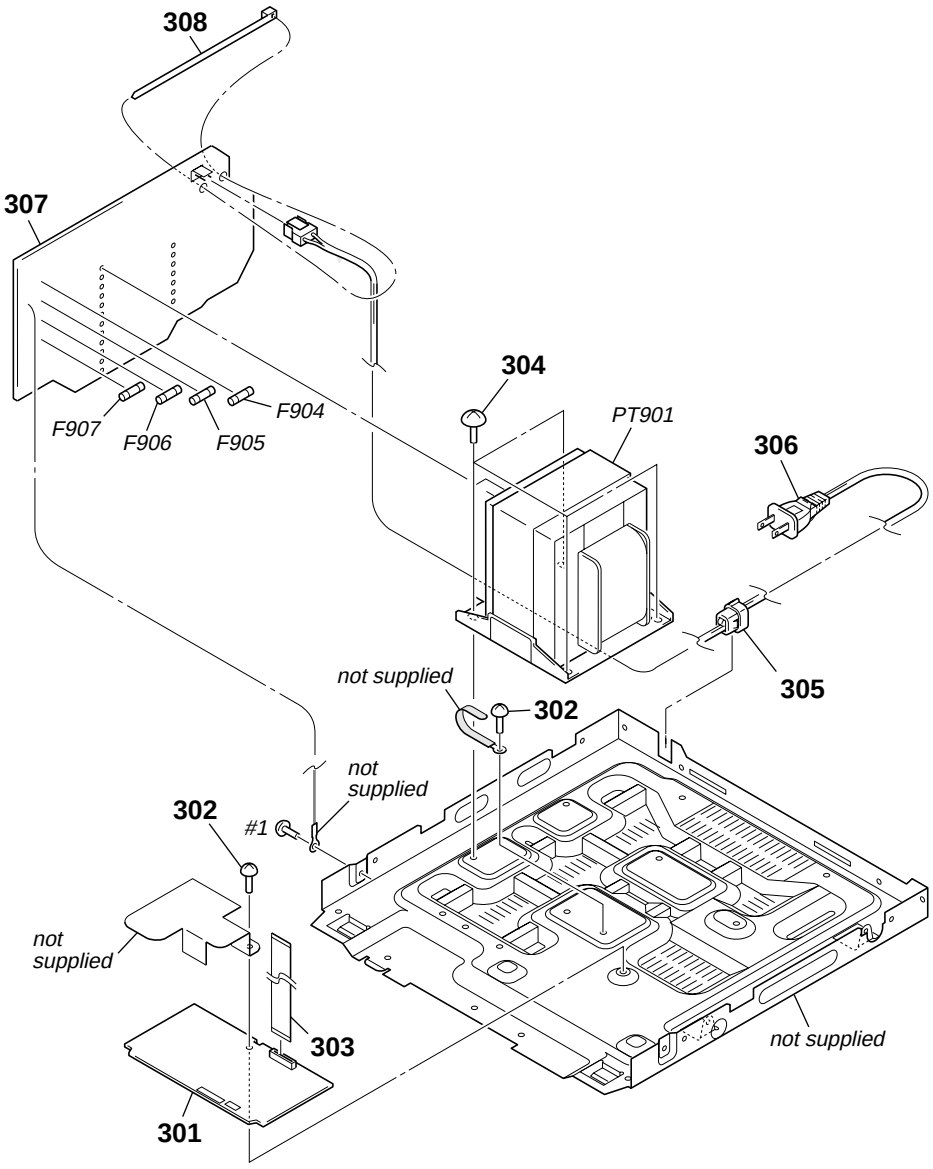
8-6. POWER BOARD, SUB WOOFER BOARD SECTION



Ref. No.	Part No.	Description	Remark
251	A-1163-222-A	POWER BOARD, COMPLETE (GX570)	
251	A-1163-223-A	POWER BOARD, COMPLETE (GX470)	
252	3-905-609-31	SCREW (TRANSISTOR)	
254	A-1163-250-A	SUB WOOFER BOARD, COMPLETE (GX570)	

Ref. No.	Part No.	Description	Remark
254	A-1178-854-A	SUB WOOFER BOARD, COMPLETE (GX470)	
#1	7-685-646-79	SCREW +BVTP 3X8 TYPE2 IT-3	

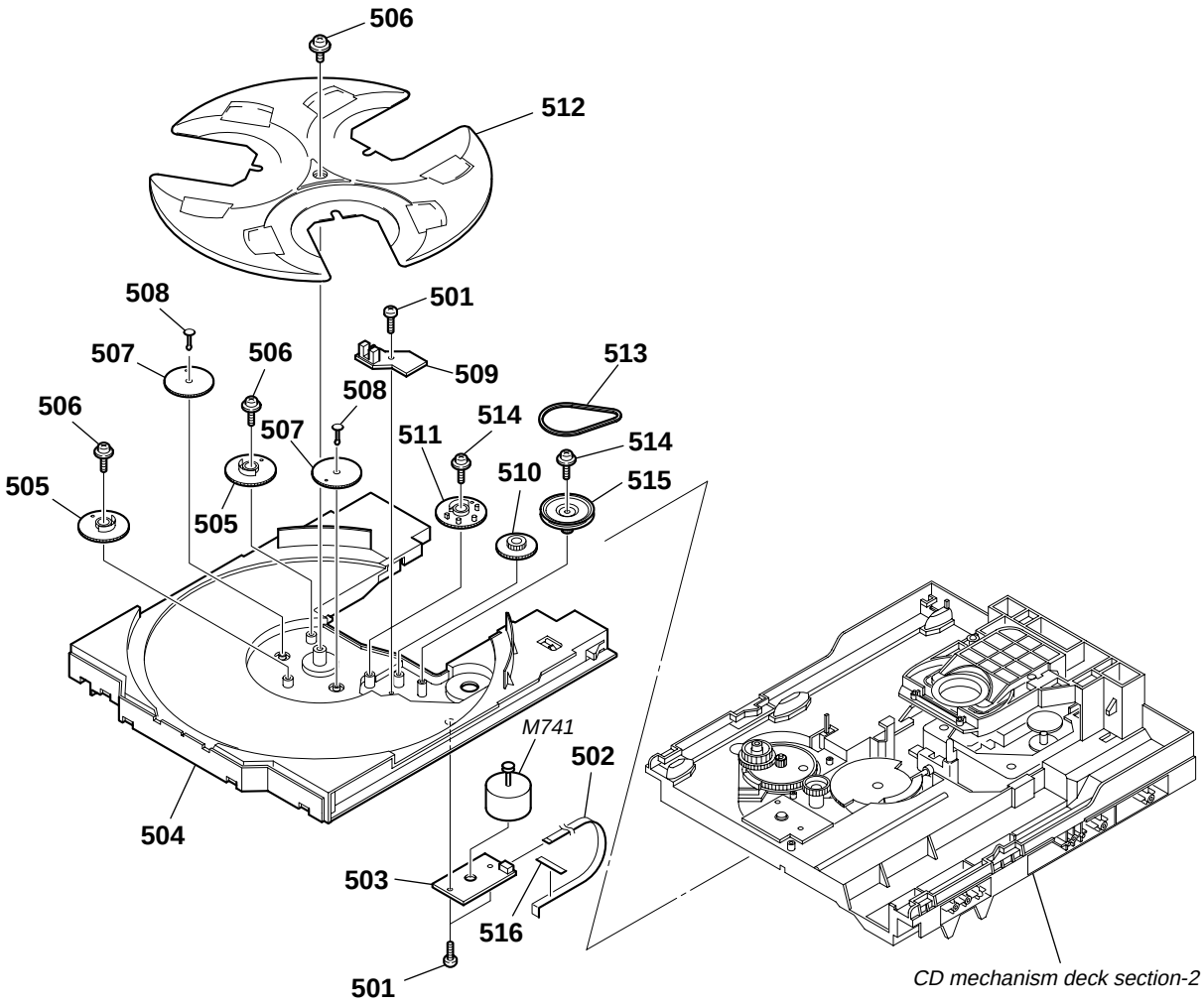
8-7. CHASSIS SECTION



Ref. No.	Part No.	Description	Remark
301	A-1171-482-A	DECK BOARD, COMPLETE	
302	3-077-331-01	+BV3 (3-CR)	
303	1-831-928-21	CABLE, FLEXIBLE FLAT (11 CORE)	
304	4-900-386-01	SCREW	
305	3-703-244-00	BUSHING (2104), CORD	
⚠306	1-830-190-11	CORD, POWER	
307	A-1163-241-A	TRANSFORMER BOARD, COMPLETE	
308	3-701-748-00	CLAMP	

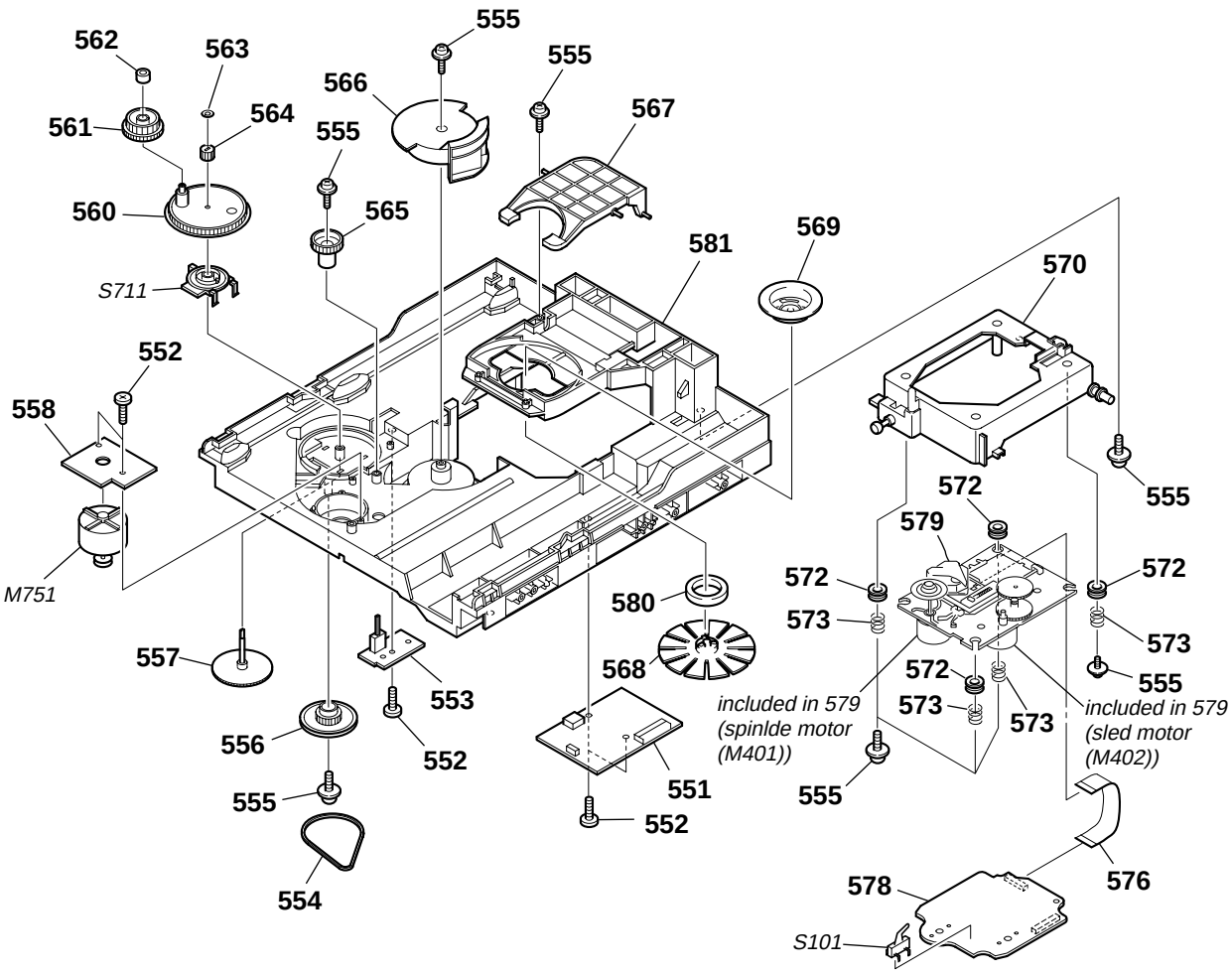
Ref. No.	Part No.	Description	Remark
⚠F904	1-533-949-33	FUSE, CYLINDRICAL (TIME LUG) (T8AL/250V)	
⚠F905	1-533-949-33	FUSE, CYLINDRICAL (TIME LUG) (T8AL/250V)	
⚠F906	1-532-465-33	FUSE (T3.15AL/250V)	
⚠F907	1-532-465-33	FUSE (T3.15AL/250V)	
⚠PT901	1-443-924-11	TRANSFORMER, POWER (GX470)	
⚠PT901	1-443-925-11	TRANSFORMER, POWER (GX570)	
#1	7-685-646-79	SCREW +BVTP 3X8 TYPE2 IT-3	

8-8. CD MECHANISM DECK SECTION-1 (CDM74KF-K6BD83S)



Ref. No.	Part No.	Description	Remark
501	4-218-253-62	SCREW (M2.6), +BTTP	
502	1-828-938-51	WIRE (FLAT TYPE) (5 CORE)	
503	1-687-134-12	MOTOR (TB) BOARD	
504	4-243-815-11	TABLE (LOADING)	
505	4-245-571-02	GEAR (STOPPER)	
506	4-218-252-61	SCREW (+PTPWH M2.6), FLOATING	
507	4-245-570-01	GEAR (JOINT)	
508	4-245-572-01	BUSHING (GEAR)	
509	1-687-132-12	SENSOR BOARD	
510	4-243-820-01	GEAR (TABLE)	
511	4-243-819-01	GEAR (GENEVA)	
512	4-243-816-11	TRAY	
513	4-243-823-11	BELT (TABLE)	
514	4-985-672-01	SCREW (+PTPWH M2.6), FLOATING	
515	4-243-821-01	PULLEY (TABLE)	
516	3-231-598-01	SHEET (BA)	
M741	A-1108-965-A	MOTOR ASSY, TABLE	

8-9. CD MECHANISM DECK SECTION-2 (CDM74KF-K6BD83S)



Ref. No.	Part No.	Description	Remark
551	A-1103-756-B	DRIVER BOARD, COMPLETE	
552	4-218-253-52	SCREW (M2.6), +BTTP	
553	1-687-669-12	SW BOARD	
554	4-244-034-11	BELT (LOADING)	
555	4-985-672-01	SCREW (+PTPWH M2.6), FLOATING	
556	4-225-844-01	GEAR (LOADING A)	
557	4-224-613-11	GEAR (SHAFT)	
558	1-687-133-12	MOTOR (LD) BOARD	
560	4-244-108-01	GEAR, SWING	
561	4-224-609-01	GEAR (LOADING C)	
562	4-224-608-01	COLLAR, SWING	
563	3-016-533-11	WASHER (FR), STOPPER	
564	4-224-611-01	GEAR (LOADING B)	
565	4-224-606-01	GEAR (RV)	
566	4-243-818-01	GEAR (U/D)	
567	4-243-822-02	LEVER (LIFTER)	

Ref. No.	Part No.	Description	Remark
568	X-2102-809-1	PULLEY (KH) ASSY	
569	4-231-189-01	PULLEY (B), CHUCKING	
570	X-2055-190-1	HOLDER (213) ASSY	
572	4-227-549-11	INSULATOR	
573	4-227-045-31	SPRING (INSULATOR), COIL	
576	1-832-404-21	CABLE, FLEXIBLE FLAT (16 CORE)	
578	A-1134-279-A	CD BOARD, COMPLETE	
⚠579	A-4735-357-A	OPTICAL PICK-UP BLOCK (KSM-213DHAP) (including spindle motor (M401), sled motor (M402)	
580	1-471-035-21	MAGNET ASSY	
581	4-243-817-22	CHASSIS	
M751	A-1108-966-A	MOTOR ASSY, LOADING	
S101	1-771-853-11	SWITCH, DETECTION (LIMIT)	
S711	1-477-680-12	ENCODER, ROTARY (DISC TABLE ADDRESS DETECT)	

CD

SECTION 9
ELECTRICAL PARTS LIST

NOTE:

- Due to standardization, replacements in the parts list may be different from the parts specified in the diagrams or the components used on the set.
- -XX and -X mean standardized parts, so they may have some difference from the original one.
- RESISTORS
  All resistors are in ohms.
  METAL: Metal-film resistor.
  METAL OXIDE: Metal oxide-film resistor.
  F: nonflammable
- Abbreviation
  CND : Canadian model
- Items marked "*" are not stocked since they are seldom required for routine service.
  Some delay should be anticipated when ordering these items.
- SEMICONDUCTORS
  In each case, u: µ, for example:
  uA... : µA... uPA... : µPA...
  uPB... : µPB... uPC... : µPC...
  uPD... : µPD...
- CAPACITORS
  uF: µF
- COILS
  uH: µH

The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

Les composants identifiés par une marque ⚠ sont critiquens pour la sécurité.
Ne les remplacer que par une pièce portant le numéro spécifié.

When indicating parts by reference number, please include the board.

Ref. No.	Part No.	Description			Remark
	A-1134-279-A	CD BOARD, COMPLETE			
		**********			
		< CAPACITOR >			
C101	1-162-919-11	CERAMIC CHIP	22PF	5%	50V
C102	1-162-919-11	CERAMIC CHIP	22PF	5%	50V
C103	1-162-919-11	CERAMIC CHIP	22PF	5%	50V
C104	1-164-230-11	CERAMIC CHIP	220PF	5%	50V
C105	1-162-919-11	CERAMIC CHIP	22PF	5%	50V
C107	1-164-230-11	CERAMIC CHIP	220PF	5%	50V
C108	1-164-230-11	CERAMIC CHIP	220PF	5%	50V
C109	1-164-230-11	CERAMIC CHIP	220PF	5%	50V
C110	1-164-230-11	CERAMIC CHIP	220PF	5%	50V
C111	1-164-230-11	CERAMIC CHIP	220PF	5%	50V
C112	1-162-919-11	CERAMIC CHIP	22PF	5%	50V
C113	1-162-919-11	CERAMIC CHIP	22PF	5%	50V
C201	1-128-995-21	ELECT CHIP	100uF	20%	10V
C202	1-164-360-11	CERAMIC CHIP	0.1uF		16V
C203	1-128-995-21	ELECT CHIP	100uF	20%	10V
C204	1-164-360-11	CERAMIC CHIP	0.1uF		16V
C205	1-164-360-11	CERAMIC CHIP	0.1uF		16V
C206	1-164-360-11	CERAMIC CHIP	0.1uF		16V
C207	1-128-995-21	ELECT CHIP	100uF	20%	10V
C208	1-164-360-11	CERAMIC CHIP	0.1uF		16V
C210	1-164-360-11	CERAMIC CHIP	0.1uF		16V
C213	1-164-360-11	CERAMIC CHIP	0.1uF		16V
C214	1-164-360-11	CERAMIC CHIP	0.1uF		16V
C215	1-164-360-11	CERAMIC CHIP	0.1uF		16V
C217	1-164-360-11	CERAMIC CHIP	0.1uF		16V
C218	1-164-360-11	CERAMIC CHIP	0.1uF		16V
C219	1-164-360-11	CERAMIC CHIP	0.1uF		16V
C220	1-164-360-11	CERAMIC CHIP	0.1uF		16V
C221	1-164-360-11	CERAMIC CHIP	0.1uF		16V
C222	1-164-360-11	CERAMIC CHIP	0.1uF		16V
C223	1-164-360-11	CERAMIC CHIP	0.1uF		16V
C224	1-164-360-11	CERAMIC CHIP	0.1uF		16V
C226	1-165-908-11	CERAMIC CHIP	1uF	10%	10V
C227	1-165-908-11	CERAMIC CHIP	1uF	10%	10V
C230	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
C232	1-164-360-11	CERAMIC CHIP	0.1uF		16V
C251	1-164-315-11	CERAMIC CHIP	470PF	5%	50V
C252	1-162-968-11	CERAMIC CHIP	0.0047uF	10%	50V
C253	1-164-315-11	CERAMIC CHIP	470PF	5%	50V
C254	1-162-968-11	CERAMIC CHIP	0.0047uF	10%	50V
C256	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C257	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C258	1-164-230-11	CERAMIC CHIP	220PF	5%	50V
C260	1-117-863-11	CERAMIC CHIP	0.47uF	10%	6.3V
C261	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C264	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V
C265	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C266	1-162-915-11	CERAMIC CHIP	10PF	0.5PF	50V
C267	1-162-910-11	CERAMIC CHIP	5PF	0.25PF	50V
C268	1-162-915-11	CERAMIC CHIP	10PF	0.5PF	50V
C271	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C272	1-164-360-11	CERAMIC CHIP	0.1uF		16V
C273	1-164-315-11	CERAMIC CHIP	470PF	5%	50V
C274	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C275	1-162-910-11	CERAMIC CHIP	5PF	0.25PF	50V
C276	1-165-908-11	CERAMIC CHIP	1uF	10%	10V
C277	1-165-908-11	CERAMIC CHIP	1uF	10%	10V
C291	1-164-315-11	CERAMIC CHIP	470PF	5%	50V
C292	1-164-315-11	CERAMIC CHIP	470PF	5%	50V
C301	1-164-360-11	CERAMIC CHIP	0.1uF		16V
C303	1-137-710-11	CERAMIC CHIP	10uF	20%	6.3V
C304	1-165-908-11	CERAMIC CHIP	1uF	10%	10V
C321	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V
C322	1-165-908-11	CERAMIC CHIP	1uF	10%	10V
C323	1-128-995-21	ELECT CHIP	100uF	20%	10V
C401	1-128-394-11	ELECT CHIP	220uF	20%	10V
C404	1-164-360-11	CERAMIC CHIP	0.1uF		16V
C405	1-164-360-11	CERAMIC CHIP	0.1uF		16V
C406	1-164-360-11	CERAMIC CHIP	0.1uF		16V
C424	1-164-360-11	CERAMIC CHIP	0.1uF		16V
C451	1-165-176-11	CERAMIC CHIP	0.047uF	10%	16V
		< CONNECTOR >			
CN102	1-770-706-21	CONNECTOR, FFC/FPC 23P			
CN301	1-770-425-51	CONNECTOR, FFC/FPC 16P			
		< IC >			
IC201	8-753-246-30	IC CXD3014A-201R			
IC203	6-709-050-01	IC BH18LB1WG-TR			
IC402	6-705-808-01	IC BA5947FM-E2			

Ref. No.	Part No.	Description			Remark
		< TRANSISTOR >			
Q321	6-551-120-01	TRANSISTOR	2SA2119K		
		< RESISTOR/FERRITE BEAD >			
R101	1-216-809-11	METAL CHIP	100	5%	1/10W
R102	1-216-809-11	METAL CHIP	100	5%	1/10W
R103	1-216-809-11	METAL CHIP	100	5%	1/10W
R104	1-216-809-11	METAL CHIP	100	5%	1/10W
R105	1-216-809-11	METAL CHIP	100	5%	1/10W
R107	1-216-809-11	METAL CHIP	100	5%	1/10W
R108	1-216-809-11	METAL CHIP	100	5%	1/10W
R109	1-216-809-11	METAL CHIP	100	5%	1/10W
R110	1-216-809-11	METAL CHIP	100	5%	1/10W
R111	1-216-809-11	METAL CHIP	100	5%	1/10W
R112	1-216-809-11	METAL CHIP	100	5%	1/10W
R113	1-216-809-11	METAL CHIP	100	5%	1/10W
R201	1-216-295-00	SHORT CHIP	0		
R202	1-216-295-00	SHORT CHIP	0		
R203	1-500-445-21	FERRITE, EMI (SMD) (2012)			
R207	1-216-295-00	SHORT CHIP	0		
R250	1-216-857-11	METAL CHIP	1M	5%	1/10W
R252	1-216-833-11	METAL CHIP	10K	5%	1/10W
R253	1-216-821-11	METAL CHIP	1K	5%	1/10W
R254	1-216-833-11	METAL CHIP	10K	5%	1/10W
R255	1-216-821-11	METAL CHIP	1K	5%	1/10W
R256	1-216-837-11	METAL CHIP	22K	5%	1/10W
R257	1-216-845-11	METAL CHIP	100K	5%	1/10W
R258	1-216-849-11	METAL CHIP	220K	5%	1/10W
R260	1-216-864-11	SHORT CHIP	0		
R265	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R266	1-216-821-11	METAL CHIP	1K	5%	1/10W
R267	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R268	1-216-833-11	METAL CHIP	10K	5%	1/10W
R270	1-216-821-11	METAL CHIP	1K	5%	1/10W
R271	1-216-857-11	METAL CHIP	1M	5%	1/10W
R275	1-216-809-11	METAL CHIP	100	5%	1/10W
R276	1-216-841-11	METAL CHIP	47K	5%	1/10W
R277	1-216-809-11	METAL CHIP	100	5%	1/10W
R278	1-216-809-11	METAL CHIP	100	5%	1/10W
R280	1-216-864-11	SHORT CHIP	0		
R291	1-216-809-11	METAL CHIP	100	5%	1/10W
R292	1-216-809-11	METAL CHIP	100	5%	1/10W
R321	1-216-789-11	METAL CHIP	2.2	5%	1/10W
R322	1-216-789-11	METAL CHIP	2.2	5%	1/10W
R323	1-216-864-11	SHORT CHIP	0		
R324	1-216-845-11	METAL CHIP	100K	5%	1/10W
R401	1-216-295-00	SHORT CHIP	0		
R421	1-216-864-11	SHORT CHIP	0		
R423	1-216-833-11	METAL CHIP	10K	5%	1/10W
R451	1-216-837-11	METAL CHIP	22K	5%	1/10W
R452	1-216-833-11	METAL CHIP	10K	5%	1/10W
		< VIBRATOR >			
X201	1-795-101-21	VIBRATOR, CERAMIC (16.9344MHz)			

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Ref. No.	Part No.	Description			Remark
	A-1171-482-A	DECK BOARD, COMPLETE			
		**********			
		< CAPACITOR/RESISTOR >			
C301	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V
C302	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V
C303	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V
C304	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V
C305	1-216-849-11	METAL CHIP	220K	5%	1/10W
C306	1-216-849-11	METAL CHIP	220K	5%	1/10W
C307	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C315	1-162-923-11	CERAMIC CHIP	47PF	5%	50V
C316	1-162-923-11	CERAMIC CHIP	47PF	5%	50V
C317	1-126-964-11	ELECT	10uF	20%	50V
C318	1-126-964-11	ELECT	10uF	20%	50V
C323	1-162-968-11	CERAMIC CHIP	0.0047uF	10%	50V
C324	1-162-968-11	CERAMIC CHIP	0.0047uF	10%	50V
C325	1-162-966-11	CERAMIC CHIP	0.0022uF	10%	50V
C326	1-162-966-11	CERAMIC CHIP	0.0022uF	10%	50V
C327	1-162-960-11	CERAMIC CHIP	220PF	10%	50V
C328	1-162-960-11	CERAMIC CHIP	220PF	10%	50V
C329	1-136-161-00	MYLAR	0.047uF	5%	50V
C330	1-136-161-00	MYLAR	0.047uF	5%	50V
C350	1-126-934-11	ELECT	220uF	20%	16V
C351	1-126-934-11	ELECT	220uF	20%	16V
C352	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C353	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C354	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C355	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C356	1-126-964-11	ELECT	10uF	20%	50V
C401	1-126-956-11	ELECT	0.1uF	20%	50V
C402	1-126-956-11	ELECT	0.1uF	20%	50V
C403	1-162-923-11	CERAMIC CHIP	47PF	5%	50V
C404	1-162-923-11	CERAMIC CHIP	47PF	5%	50V
C405	1-162-960-11	CERAMIC CHIP	220PF	10%	50V
C406	1-162-960-11	CERAMIC CHIP	220PF	10%	50V
C409	1-126-964-11	ELECT	10uF	20%	50V
C410	1-126-964-11	ELECT	10uF	20%	50V
C411	1-162-915-11	CERAMIC CHIP	10PF	0.5PF	50V
C412	1-162-915-11	CERAMIC CHIP	10PF	0.5PF	50V
C413	1-162-960-11	CERAMIC CHIP	220PF	10%	50V
C414	1-162-960-11	CERAMIC CHIP	220PF	10%	50V
C415	1-162-968-11	CERAMIC CHIP	0.0047uF	10%	50V
C416	1-162-968-11	CERAMIC CHIP	0.0047uF	10%	50V
C417	1-107-726-91	CERAMIC CHIP	0.01uF	10%	16V
C418	1-107-726-91	CERAMIC CHIP	0.01uF	10%	16V
C430	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C431	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C433	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C452	1-126-947-11	ELECT	47uF	20%	35V
C453	1-130-471-00	MYLAR	0.001uF	5%	50V
C454	1-130-479-00	MYLAR	0.0047uF	5%	50V
C456	1-130-483-00	MYLAR	0.01uF	5%	50V
C458	1-130-475-00	MYLAR	0.0022uF	5%	50V
C461	1-162-962-11	CERAMIC CHIP	470PF	10%	50V
C462	1-162-962-11	CERAMIC CHIP	470PF	10%	50V

DECK

Ref. No.	Part No.	Description			Remark
		< CONNECTOR >			
CN008	1-568-830-11	CONNECTOR, FFC 11P			
CN301	1-815-444-11	PIN, CONNECTOR (PWB) 3P			
CN302	1-815-449-11	PIN, CONNECTOR (PWB) 8P			
		< DIODE >			
D301	6-501-165-01	DIODE UDZW-TE17-4.3B			
D401	6-500-335-01	DIODE MC2838-T112-1			
		< JUMPER RESISTOR >			
FB301	1-216-864-11	SHORT CHIP	0		
		< IC >			
IC301	6-702-457-01	IC NJM14558M-TE2			
IC401	8-759-909-71	IC BA4558F			
		< JUMPER RESISTOR >			
JR301	1-216-864-11	SHORT CHIP	0		
JR302	1-216-864-11	SHORT CHIP	0		
JR306	1-216-864-11	SHORT CHIP	0		
JR307	1-216-864-11	SHORT CHIP	0		
JR310	1-216-864-11	SHORT CHIP	0		
JR311	1-216-864-11	SHORT CHIP	0		
JR402	1-216-864-11	SHORT CHIP	0		
		< COIL >			
L451	1-443-760-11	TRANSFORMER, BIAS OSCILLATION			
		< TRANSISTOR >			
Q301	6-550-290-01	FET	2SJ460-T		
Q302	6-550-290-01	FET	2SJ460-T		
Q303	6-550-290-01	FET	2SJ460-T		
Q304	6-550-290-01	FET	2SJ460-T		
Q305	8-729-120-28	TRANSISTOR	2SC1623-L5L6		
Q306	8-729-120-28	TRANSISTOR	2SC1623-L5L6		
Q400	8-729-045-62	FET	2SK2158-T2B		
Q401	8-729-045-62	FET	2SK2158-T2B		
Q402	8-729-045-62	FET	2SK2158-T2B		
Q403	8-729-600-22	TRANSISTOR	2SA1235-F		
Q404	8-729-600-22	TRANSISTOR	2SA1235-F		
Q405	8-729-120-28	TRANSISTOR	2SC1623-L5L6		
Q406	8-729-600-22	TRANSISTOR	2SA1235-F		
Q407	8-729-600-22	TRANSISTOR	2SA1235-F		
Q408	8-729-600-22	TRANSISTOR	2SA1235-F		
Q409	6-551-276-01	TRANSISTOR	RT1N431C-TP-1		
Q410	6-551-276-01	TRANSISTOR	RT1N431C-TP-1		
Q451	8-729-037-13	TRANSISTOR	KTA1271Y		
Q452	8-729-120-28	TRANSISTOR	2SC1623-L5L6		
Q453	8-729-011-92	TRANSISTOR	2SC2001TP-K1K2		
		< RESISTOR >			
R301	1-216-841-11	METAL CHIP	47K	5%	1/10W
R302	1-216-841-11	METAL CHIP	47K	5%	1/10W
R303	1-216-841-11	METAL CHIP	47K	5%	1/10W
R304	1-216-841-11	METAL CHIP	47K	5%	1/10W
R305	1-216-849-11	METAL CHIP	220K	5%	1/10W
R306	1-216-849-11	METAL CHIP	220K	5%	1/10W
R307	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R308	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R309	1-216-817-11	METAL CHIP	470	5%	1/10W
R310	1-216-817-11	METAL CHIP	470	5%	1/10W
R311	1-216-813-11	METAL CHIP	220	5%	1/10W
R312	1-216-813-11	METAL CHIP	220	5%	1/10W
R313	1-216-805-11	METAL CHIP	47	5%	1/10W
R314	1-216-805-11	METAL CHIP	47	5%	1/10W
R315	1-216-809-11	METAL CHIP	100	5%	1/10W
R316	1-216-809-11	METAL CHIP	100	5%	1/10W
R317	1-216-853-11	METAL CHIP	470K	5%	1/10W
R318	1-216-853-11	METAL CHIP	470K	5%	1/10W
R319	1-216-837-11	METAL CHIP	22K	5%	1/10W
R320	1-216-837-11	METAL CHIP	22K	5%	1/10W
R323	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R324	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R325	1-216-809-11	METAL CHIP	100	5%	1/10W
R326	1-216-809-11	METAL CHIP	100	5%	1/10W
R349	1-216-809-11	METAL CHIP	100	5%	1/10W
R350	1-216-864-11	SHORT CHIP	0		
R351	1-216-821-11	METAL CHIP	1K	5%	1/10W
R401	1-216-841-11	METAL CHIP	47K	5%	1/10W
R402	1-216-841-11	METAL CHIP	47K	5%	1/10W
R403	1-216-837-11	METAL CHIP	22K	5%	1/10W
R404	1-216-837-11	METAL CHIP	22K	5%	1/10W
R405	1-216-841-11	METAL CHIP	47K	5%	1/10W
R406	1-216-841-11	METAL CHIP	47K	5%	1/10W
R407	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R408	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R409	1-216-845-11	METAL CHIP	100K	5%	1/10W
R410	1-216-845-11	METAL CHIP	100K	5%	1/10W
R411	1-216-853-11	METAL CHIP	470K	5%	1/10W
R412	1-216-853-11	METAL CHIP	470K	5%	1/10W
R413	1-216-849-11	METAL CHIP	220K	5%	1/10W
R414	1-216-849-11	METAL CHIP	220K	5%	1/10W
R415	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R416	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R423	1-216-841-11	METAL CHIP	47K	5%	1/10W
R424	1-216-841-11	METAL CHIP	47K	5%	1/10W
R427	1-216-864-11	SHORT CHIP	0		
R428	1-216-864-11	SHORT CHIP	0		
R429	1-216-833-11	METAL CHIP	10K	5%	1/10W
R430	1-216-833-11	METAL CHIP	10K	5%	1/10W
R431	1-216-821-11	METAL CHIP	1K	5%	1/10W
R432	1-216-821-11	METAL CHIP	1K	5%	1/10W
R433	1-216-841-11	METAL CHIP	47K	5%	1/10W
R434	1-216-841-11	METAL CHIP	47K	5%	1/10W
R435	1-216-833-11	METAL CHIP	10K	5%	1/10W
R436	1-216-833-11	METAL CHIP	10K	5%	1/10W
R437	1-216-864-11	SHORT CHIP	0		
R438	1-216-864-11	SHORT CHIP	0		
R439	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R440	1-216-833-11	METAL CHIP	10K	5%	1/10W
R441	1-216-864-11	SHORT CHIP	0		
R442	1-216-841-11	METAL CHIP	47K	5%	1/10W
R443	1-216-833-11	METAL CHIP	10K	5%	1/10W
R444	1-216-845-11	METAL CHIP	100K	5%	1/10W

Ref. No.	Part No.	Description			Remark
R445	1-216-864-11	SHORT CHIP	0		
R446	1-216-864-11	SHORT CHIP	0		
R449	1-216-801-11	METAL CHIP	22	5%	1/10W
R450	1-216-801-11	METAL CHIP	22	5%	1/10W
R451	1-216-833-11	METAL CHIP	10K	5%	1/10W
R452	1-216-841-11	METAL CHIP	47K	5%	1/10W
R453	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R454	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R455	1-216-797-11	METAL CHIP	10	5%	1/10W
R456	1-216-801-11	METAL CHIP	22	5%	1/10W
R457	1-216-837-11	METAL CHIP	22K	5%	1/10W
R458	1-216-793-11	METAL CHIP	4.7	5%	1/10W
R459	1-216-864-11	SHORT CHIP	0		
R460	1-216-864-11	SHORT CHIP	0		
R461	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R462	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R463	1-216-821-11	METAL CHIP	1K	5%	1/10W
R464	1-216-821-11	METAL CHIP	1K	5%	1/10W
R465	1-216-864-11	SHORT CHIP	0		
R466	1-216-864-11	SHORT CHIP	0		
R481	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R482	1-216-841-11	METAL CHIP	47K	5%	1/10W
R483	1-216-837-11	METAL CHIP	22K	5%	1/10W
R484	1-216-837-11	METAL CHIP	22K	5%	1/10W
R485	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R488	1-216-837-11	METAL CHIP	22K	5%	1/10W
R489	1-216-837-11	METAL CHIP	22K	5%	1/10W
R490	1-216-829-11	METAL CHIP	4.7K	5%	1/10W

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	A-1103-756-B	DRIVER BOARD, COMPLETE			
		**********			
		< CAPACITOR >			
C715	1-126-933-11	ELECT	100uF	20%	16V
C731	1-126-964-11	ELECT	10uF	20%	50V
C735	1-164-159-21	CERAMIC	0.1uF		50V
C736	1-164-159-21	CERAMIC	0.1uF		50V
C737	1-164-159-21	CERAMIC	0.1uF		50V
C741	1-162-306-11	CERAMIC	0.01uF	20%	16V
C751	1-162-306-11	CERAMIC	0.01uF	20%	16V
C752	1-164-159-21	CERAMIC	0.1uF		50V
		< CONNECTOR >			
CN701	1-784-735-11	CONNECTOR, FFC 13P			
CN702	1-784-766-11	CONNECTOR, FFC 5P			
* CN703	1-564-720-11	PIN, CONNECTOR (SMALL TYPE) 4P			
CN704	1-785-328-11	PIN, CONNECTOR (LIGHT ANGRE) 2P			
		< DIODE >			
D701	8-719-921-42	DIODE MTZJ-5.1A			
D711	8-719-109-69	DIODE RD3.6ESB2			
		< IC >			
IC701	8-759-598-69	IC BA6956AN			
IC712	8-759-598-69	IC BA6956AN			

Ref. No.	Part No.	Description			Remark
		< TRANSISTOR >			
Q731	8-729-029-66	TRANSISTOR	DTC114ESA		
		< RESISTOR >			
R701	1-249-413-11	CARBON	470	5%	1/4W
R702	1-247-807-31	CARBON	100	5%	1/4W
R711	1-249-417-11	CARBON	1K	5%	1/4W
R712	1-249-425-11	CARBON	4.7K	5%	1/4W
R713	1-249-433-11	CARBON	22K	5%	1/4W
R721	1-249-425-11	CARBON	4.7K	5%	1/4W
R722	1-249-425-11	CARBON	4.7K	5%	1/4W
R723	1-249-425-11	CARBON	4.7K	5%	1/4W
R731	1-247-807-31	CARBON	100	5%	1/4W
R732	1-249-429-11	CARBON	10K	5%	1/4W
R733	1-249-417-11	CARBON	1K	5%	1/4W
R734	1-249-430-11	CARBON	12K	5%	1/4W
R736	1-249-412-11	CARBON	390	5%	1/4W
R751	1-249-425-11	CARBON	4.7K	5%	1/4W

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	A-1159-677-A	KEY LEFT BOARD, COMPLETE			
		**********			
		< DIODE >			
D611	6-501-483-01	LED SLR-325VCT31P (STANDBY)			
D622	8-719-063-92	LED SLR325MC-M-T31-NP (SUBWOOFER)			
		< RESISTOR >			
R626	1-216-821-11	METAL CHIP	1K	5%	1/10W
R639	1-216-821-11	METAL CHIP	1K	5%	1/10W
R640	1-216-821-11	METAL CHIP	1K	5%	1/10W
R652	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R653	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R654	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R655	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R656	1-216-833-11	METAL CHIP	10K	5%	1/10W
R675	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R676	1-216-833-11	METAL CHIP	10K	5%	1/10W
R677	1-216-837-11	METAL CHIP	22K	5%	1/10W
R678	1-216-841-11	METAL CHIP	47K	5%	1/10W
		< SWITCH >			
S601	1-762-875-21	SWITCH, KEYBOARD (I/⏻)			
S602	1-762-875-21	SWITCH, KEYBOARD (KARAOKE)			
S603	1-762-875-21	SWITCH, KEYBOARD (AUDIO IN)			
S604	1-762-875-21	SWITCH, KEYBOARD (TAPE A/B)			
S605	1-762-875-21	SWITCH, KEYBOARD (TUNER/BAND)			
S606	1-762-875-21	SWITCH, KEYBOARD (CD)			
S625	1-762-875-21	SWITCH, KEYBOARD (ILLUMINATION)			
S626	1-762-875-21	SWITCH, KEYBOARD (REC PAUSE/START)			
S627	1-762-875-21	SWITCH, KEYBOARD (CD SYNC)			
S628	1-762-875-21	SWITCH, KEYBOARD (SUBWOOFER)			

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KEY RIGHT **MAIN**

Ref. No.	Part No.	Description			Remark
	A-1159-681-A	KEY RIGHT BOARD, COMPLETE			
		**********			
		< CAPACITOR >			
C643	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C644	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
		< RESISTOR >			
R682	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R683	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R684	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R685	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R686	1-216-833-11	METAL CHIP	10K	5%	1/10W
R687	1-216-837-11	METAL CHIP	22K	5%	1/10W
R688	1-216-841-11	METAL CHIP	47K	5%	1/10W
		< SWITCH >			
S624	1-762-875-21	SWITCH, KEYBOARD (ENTER)			
S631	1-762-875-21	SWITCH, KEYBOARD (EQ BAND)			
S632	1-762-875-21	SWITCH, KEYBOARD (SURRROUND)			
S633	1-762-875-21	SWITCH, KEYBOARD (GROOVE)			
S634	1-762-875-21	SWITCH, KEYBOARD (DISC ⏏)			
S635	1-762-875-21	SWITCH, KEYBOARD (DISC SKIP/EX-CHANGE)			
S636	1-762-875-21	SWITCH, KEYBOARD (DISC 3)			
S637	1-762-875-21	SWITCH, KEYBOARD (DISC 2)			
S638	1-762-875-21	SWITCH, KEYBOARD (DISC 1)			
S672	1-786-418-11	SWITCH, ROTARY (ENCODER) (MULTI JOG)			
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	A-1163-189-A	MAIN BOARD, COMPLETE (GX570)			
	A-1163-190-A	MAIN BOARD, COMPLETE (GX470)			
		**********			
	7-685-872-01	SCREW +BVTT 3X8 (S)			
		< CAPACITOR >			
C001	1-136-497-81	FILM	0.1uF	5%	50V
C002	1-136-497-81	FILM	0.1uF	5%	50V
C006	1-126-964-11	ELECT	10uF	20%	50V
C007	1-126-965-11	ELECT	22uF	20%	50V
C008	1-126-943-11	ELECT	2200uF	20%	25V
C010	1-165-621-11	CERAMIC CHIP	0.1uF		50V
C011	1-136-497-81	FILM	0.1uF	5%	50V
C012	1-136-497-81	FILM	0.1uF	5%	50V
C013	1-126-943-11	ELECT	2200uF	20%	25V
C015	1-126-933-11	ELECT	100uF	20%	16V
C023	1-126-943-11	ELECT	2200uF	20%	25V
C025	1-126-933-11	ELECT	100uF	20%	16V
C026	1-162-974-11	CERAMIC CHIP	0.01uF		50V
C027	1-162-974-11	CERAMIC CHIP	0.01uF		50V
C029	1-126-964-11	ELECT	10uF	20%	50V (GX570)
C030	1-126-933-11	ELECT	100uF	20%	16V (GX570)
C031	1-216-864-11	SHORT CHIP	0		
C032	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V
C033	1-126-933-11	ELECT	100uF	20%	16V
C034	1-126-963-11	ELECT	4.7uF	20%	50V
C035	1-126-947-11	ELECT	47uF	20%	35V

Ref. No.	Part No.	Description			Remark
C063	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C064	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V
C065	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V
C066	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V
C068	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V
C069	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V
C109	1-126-964-11	ELECT	10uF	20%	50V
C110	1-126-964-11	ELECT	10uF	20%	50V
C111	1-126-965-11	ELECT	22uF	20%	50V
C112	1-126-947-11	ELECT	47uF	20%	35V
C114	1-164-360-11	CERAMIC CHIP	0.1uF		16V
C115	1-126-933-11	ELECT	100uF	20%	16V
C116	1-126-960-11	ELECT	1uF	20%	50V
C117	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V
C118	1-126-961-11	ELECT	2.2uF	20%	50V
C119	1-126-961-11	ELECT	2.2uF	20%	50V
C120	1-164-360-11	CERAMIC CHIP	0.1uF		16V
C121	1-126-933-11	ELECT	100uF	20%	16V
C122	1-165-176-11	CERAMIC CHIP	0.047uF	10%	16V
C123	1-162-923-11	CERAMIC CHIP	47PF	5%	50V
C124	1-162-923-11	CERAMIC CHIP	47PF	5%	50V
C125	1-126-960-11	ELECT	1uF	20%	50V
C126	1-126-960-11	ELECT	1uF	20%	50V
C129	1-126-960-11	ELECT	1uF	20%	50V
C130	1-126-960-11	ELECT	1uF	20%	50V
C137	1-126-960-11	ELECT	1uF	20%	50V
C138	1-126-960-11	ELECT	1uF	20%	50V
C139	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C140	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C141	1-126-964-11	ELECT	10uF	20%	50V
C142	1-126-964-11	ELECT	10uF	20%	50V
C143	1-137-374-11	MYLAR	0.047uF	5%	50V
C144	1-137-374-11	MYLAR	0.047uF	5%	50V
C145	1-162-968-11	CERAMIC CHIP	0.0047uF	10%	50V
C146	1-162-968-11	CERAMIC CHIP	0.0047uF	10%	50V
C147	1-164-362-11	CERAMIC CHIP	470PF	5%	50V
C148	1-164-362-11	CERAMIC CHIP	470PF	5%	50V
C149	1-164-227-11	CERAMIC CHIP	0.022uF	10%	25V
C150	1-164-227-11	CERAMIC CHIP	0.022uF	10%	25V
C151	1-164-227-11	CERAMIC CHIP	0.022uF	10%	25V
C152	1-164-227-11	CERAMIC CHIP	0.022uF	10%	25V
C153	1-126-960-11	ELECT	1uF	20%	50V
C154	1-126-960-11	ELECT	1uF	20%	50V
C155	1-136-167-00	MYLAR	0.15uF	5%	50V
C156	1-136-167-00	MYLAR	0.15uF	5%	50V
C157	1-136-167-00	MYLAR	0.15uF	5%	50V
C158	1-136-167-00	MYLAR	0.15uF	5%	50V
C159	1-162-960-11	CERAMIC CHIP	220PF	10%	50V
C160	1-162-960-11	CERAMIC CHIP	220PF	10%	50V
C173	1-162-949-11	CERAMIC CHIP	47PF	5%	50V
C174	1-162-949-11	CERAMIC CHIP	47PF	5%	50V
C253	1-162-923-11	CERAMIC CHIP	47PF	5%	50V
C254	1-162-923-11	CERAMIC CHIP	47PF	5%	50V
C255	1-162-919-11	CERAMIC CHIP	22PF	5%	50V
C256	1-162-919-11	CERAMIC CHIP	22PF	5%	50V
C257	1-126-947-11	ELECT	47uF	20%	35V
C258	1-126-947-11	ELECT	47uF	20%	35V
C259	1-126-964-11	ELECT	10uF	20%	50V

Ref. No.	Part No.	Description			Remark
C260	1-124-261-00	ELECT	10uF	20%	25V
C263	1-126-935-11	ELECT	470uF	20%	16V
C264	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V
C265	1-126-963-11	ELECT	4.7uF	20%	50V
C266	1-126-963-11	ELECT	4.7uF	20%	50V
C267	1-162-968-11	CERAMIC CHIP	0.0047uF	10%	50V
C268	1-162-968-11	CERAMIC CHIP	0.0047uF	10%	50V
C271	1-165-176-11	CERAMIC CHIP	0.047uF	10%	16V
C273	1-115-467-11	CERAMIC CHIP	0.22uF	10%	10V
C274	1-124-261-00	ELECT	10uF	20%	25V
C275	1-164-362-11	CERAMIC CHIP	470PF	5%	50V
C276	1-115-467-11	CERAMIC CHIP	0.22uF	10%	10V
C278	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C281	1-162-974-11	CERAMIC CHIP	0.01uF		50V
C305	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V
C308	1-126-963-11	ELECT	4.7uF	20%	50V (GX570)
C309	1-126-963-11	ELECT	4.7uF	20%	50V (GX570)
C310	1-164-156-11	CERAMIC CHIP	0.1uF		25V (GX570)
C311	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V (GX570)
C312	1-107-726-91	CERAMIC CHIP	0.01uF	10%	16V (GX570)
C313	1-126-934-11	ELECT	220uF	20%	16V (GX570)
C317	1-126-926-11	ELECT	1000uF	20%	10V
C331	1-126-960-11	ELECT	1uF	20%	50V (GX570)
C332	1-126-960-11	ELECT	1uF	20%	50V (GX570)
C385	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
C386	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
C387	1-162-962-11	CERAMIC CHIP	470PF	10%	50V
C388	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
C391	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C901	1-126-933-11	ELECT	100uF	20%	16V
C902	1-126-964-11	ELECT	10uF	20%	50V
C903	1-126-959-11	ELECT	0.47uF	20%	50V
C904	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C906	1-126-964-11	ELECT	10uF	20%	50V
C908	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C909	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C910	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C911	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V
C912	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C913	1-162-905-11	CERAMIC CHIP	1PF	0.25PF	50V
C914	1-162-919-11	CERAMIC CHIP	22PF	5%	50V
C916	1-114-154-11	DOUBLE LAYER	47000uF		5.5V
C917	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C918	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V
C919	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C920	1-162-905-11	CERAMIC CHIP	1PF	0.25PF	50V
C921	1-126-961-11	ELECT	2.2uF	20%	50V
C922	1-126-963-11	ELECT	4.7uF	20%	50V
C923	1-162-960-11	CERAMIC CHIP	220PF	10%	50V
C926	1-162-960-11	CERAMIC CHIP	220PF	10%	50V
C927	1-162-919-11	CERAMIC CHIP	22PF	5%	50V

Ref. No.	Part No.	Description	Remark
		< CONNECTOR >	
* CN031	1-573-094-11	SOCKET, CONNECTOR 13P	
CN041	1-819-131-11	PIN, CONNECTOR 3P	
CN061	1-568-828-11	CONNECTOR, FFC 9P	
CN091	1-568-828-11	CONNECTOR, FFC 9P	
CN201	1-568-830-11	CONNECTOR, FFC 11P	
CN301	1-779-291-11	CONNECTOR, FFC (LIF (NON-ZIF)) 23P	
* CN333	1-691-047-21	HOUSING, CONNECTOR 15P (GX570)	
CN991	1-784-780-11	CONNECTOR, FFC 19P	
		< DIODE >	
D001	6-500-522-21	DIODE 10EDB40-TB3	
D002	6-500-522-21	DIODE 10EDB40-TB3	
D003	6-500-522-21	DIODE 10EDB40-TB3	
D004	6-500-522-21	DIODE 10EDB40-TB3	
D005	8-719-085-36	DIODE 11EQS04-TB5 (GX570)	
D006	8-719-988-61	DIODE 1SS355TE-17	
D007	6-501-166-01	DIODE UDZW-TE17-4.7B	
D008	8-719-000-08	DIODE MC2838	
D009	6-500-335-01	DIODE MC2838-T112-1	
D011	6-500-522-21	DIODE 10EDB40-TB3	
D012	6-500-522-21	DIODE 10EDB40-TB3	
D013	6-500-522-21	DIODE 10EDB40-TB3	
D014	6-500-522-21	DIODE 10EDB40-TB3	
D021	6-500-522-21	DIODE 10EDB40-TB3	
D022	6-500-522-21	DIODE 10EDB40-TB3	
D023	6-500-522-21	DIODE 10EDB40-TB3	
D024	6-500-522-21	DIODE 10EDB40-TB3	
D031	8-719-988-61	DIODE 1SS355TE-17	
D035	8-719-000-08	DIODE MC2838	
D036	8-719-000-07	DIODE MC2836	
D301	6-500-522-21	DIODE 10EDB40-TB3	
D302	6-500-522-21	DIODE 10EDB40-TB3	
D901	6-501-166-01	DIODE UDZW-TE17-4.7B	
D902	8-719-000-07	DIODE MC2836	
D905	8-719-988-61	DIODE 1SS355TE-17	
D910	8-719-988-61	DIODE 1SS355TE-17	
D921	6-500-848-01	DIODE MC2840-T112-1	
D923	6-500-848-01	DIODE MC2840-T112-1	
D943	8-719-000-08	DIODE MC2838	
D947	8-719-988-61	DIODE 1SS355TE-17	
		< IC >	
IC006	6-702-771-01	IC TA78033LS	
IC007	6-703-547-01	IC TA7805LS (GX570)	
IC011	8-759-701-59	IC NJM78M09FA	
IC021	8-759-701-59	IC NJM78M09FA	
IC101	6-709-331-01	IC R2S15207FP	
IC251	8-759-909-71	IC BA4558F	
IC301	6-707-282-01	IC MM1615ANLE (GX570)	
IC901	(Not supplied)	IC uPD78F0547GC (S)-UBT-A	
IC902	8-759-713-61	IC PST3429UL	
		< JUMPER RESISTOR >	
JR101	1-216-864-11	SHORT CHIP 0	
JR102	1-216-864-11	SHORT CHIP 0	
JR103	1-216-864-11	SHORT CHIP 0	

Note: IC901 on the MAIN board cannot exchange with single. When IC901 is damaged, exchange the entire mounted board.

MAIN

Ref. No.	Part No.	Description			Remark
JR104	1-216-864-11	SHORT CHIP	0		
JR105	1-216-864-11	SHORT CHIP	0		
JR106	1-216-864-11	SHORT CHIP	0		
JR107	1-216-864-11	SHORT CHIP	0		
JR108	1-216-864-11	SHORT CHIP	0		
JR109	1-216-864-11	SHORT CHIP	0		
JR110	1-216-864-11	SHORT CHIP	0		
JR111	1-216-864-11	SHORT CHIP	0		
JR112	1-216-864-11	SHORT CHIP	0		
JR114	1-216-864-11	SHORT CHIP	0		
JR115	1-216-864-11	SHORT CHIP	0		
JR117	1-216-864-11	SHORT CHIP	0		
JR118	1-216-864-11	SHORT CHIP	0		
JR119	1-216-864-11	SHORT CHIP	0		
JR120	1-216-864-11	SHORT CHIP	0		
JR121	1-216-864-11	SHORT CHIP	0		
JR122	1-216-864-11	SHORT CHIP	0		
JR123	1-216-864-11	SHORT CHIP	0		
		< TRANSISTOR >			
Q002	8-729-120-28	TRANSISTOR	2SC1623-L5L6		
Q011	8-729-027-43	TRANSISTOR	DTC114EKA-T146		
Q041	8-729-120-28	TRANSISTOR	2SC1623-L5L6		
Q042	8-729-037-13	TRANSISTOR	KTA1271Y		
Q043	8-729-037-03	TRANSISTOR	KTA1266GR-AT		
Q044	8-729-120-28	TRANSISTOR	2SC1623-L5L6		
Q045	8-729-120-28	TRANSISTOR	2SC1623-L5L6		
Q046	8-729-045-62	FET	2SK2158-T2B		
Q111	8-729-120-28	TRANSISTOR	2SC1623-L5L6		
Q112	8-729-120-28	TRANSISTOR	2SC1623-L5L6		
Q113	8-729-120-28	TRANSISTOR	2SC1623-L5L6		
Q114	8-729-120-28	TRANSISTOR	2SC1623-L5L6		
Q251	8-729-120-28	TRANSISTOR	2SC1623-L5L6		
Q252	8-729-120-28	TRANSISTOR	2SC1623-L5L6		
Q261	8-729-027-23	TRANSISTOR	DTA114EKA-T146		
Q271	8-729-120-28	TRANSISTOR	2SC1623-L5L6		
Q272	8-729-120-28	TRANSISTOR	2SC1623-L5L6		
Q274	6-551-276-01	TRANSISTOR	RT1N431C-TP-1		
Q276	8-729-120-28	TRANSISTOR	2SC1623-L5L6		
Q277	8-729-120-28	TRANSISTOR	2SC1623-L5L6		
Q301	8-729-120-28	TRANSISTOR	2SC1623-L5L6 (GX570)		
Q302	8-729-120-28	TRANSISTOR	2SC1623-L5L6 (GX570)		
Q303	8-729-027-23	TRANSISTOR	DTA114EKA-T146 (GX570)		
Q304	8-729-037-13	TRANSISTOR	KTA1271Y (GX570)		
Q305	8-729-027-43	TRANSISTOR	DTC114EKA-T146 (GX570)		
Q901	8-729-120-28	TRANSISTOR	2SC1623-L5L6		
Q902	8-729-120-28	TRANSISTOR	2SC1623-L5L6		
Q903	8-729-037-13	TRANSISTOR	KTA1271Y		
Q904	8-729-120-28	TRANSISTOR	2SC1623-L5L6		
		< RESISTOR >			
R001	1-216-801-11	METAL CHIP	22	5%	1/10W
R005	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R006	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R008	1-216-833-11	METAL CHIP	10K	5%	1/10W (GX570)
R009	1-216-833-11	METAL CHIP	10K	5%	1/10W (GX570)

Ref. No.	Part No.	Description			Remark
R010	1-216-837-11	METAL CHIP	22K	5%	1/10W
R011	1-216-833-11	METAL CHIP	10K	5%	1/10W
R013	1-216-837-11	METAL CHIP	22K	5%	1/10W
R014	1-216-833-11	METAL CHIP	10K	5%	1/10W
R016	1-216-845-11	METAL CHIP	100K	5%	1/10W
R032	1-216-821-11	METAL CHIP	1K	5%	1/10W
R033	1-216-837-11	METAL CHIP	22K	5%	1/10W
R034	1-216-837-11	METAL CHIP	22K	5%	1/10W
R035	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R036	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R037	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R039	1-260-308-11	CARBON	22	5%	1/2W
R041	1-216-864-11	SHORT CHIP	0		
R042	1-216-833-11	METAL CHIP	10K	5%	1/10W
R043	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R045	1-216-821-11	METAL CHIP	1K	5%	1/10W
R046	1-216-793-11	METAL CHIP	4.7	5%	1/10W
R047	1-216-789-11	METAL CHIP	2.2	5%	1/10W
R048	1-216-801-11	METAL CHIP	22	5%	1/10W
R049	1-216-849-11	METAL CHIP	220K	5%	1/10W
R050	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R051	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R052	1-216-853-11	METAL CHIP	470K	5%	1/10W
R053	1-216-837-11	METAL CHIP	22K	5%	1/10W
R054	1-216-837-11	METAL CHIP	22K	5%	1/10W
R055	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R056	1-216-833-11	METAL CHIP	10K	5%	1/10W
R057	1-216-821-11	METAL CHIP	1K	5%	1/10W
⚠R059	1-215-892-11	METAL OXIDE	1K	5%	2W F
⚠R060	1-215-892-11	METAL OXIDE	1K	5%	2W F
R061	1-216-797-11	METAL CHIP	10	5%	1/10W
R063	1-216-809-11	METAL CHIP	100	5%	1/10W
R064	1-216-809-11	METAL CHIP	100	5%	1/10W
R070	1-216-833-11	METAL CHIP	10K	5%	1/10W
R101	1-216-833-11	METAL CHIP	10K	5%	1/10W
R102	1-216-821-11	METAL CHIP	1K	5%	1/10W
R103	1-216-833-11	METAL CHIP	10K	5%	1/10W
R104	1-216-833-11	METAL CHIP	10K	5%	1/10W
R105	1-216-809-11	METAL CHIP	100	5%	1/10W
R108	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R109	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R110	1-216-841-11	METAL CHIP	47K	5%	1/10W
R111	1-216-845-11	METAL CHIP	100K	5%	1/10W
R112	1-216-817-11	METAL CHIP	470	5%	1/10W
R113	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R114	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R116	1-216-809-11	METAL CHIP	100	5%	1/10W
R119	1-216-817-11	METAL CHIP	470	5%	1/10W
R120	1-216-817-11	METAL CHIP	470	5%	1/10W
R121	1-216-809-11	METAL CHIP	100	5%	1/10W
R122	1-216-809-11	METAL CHIP	100	5%	1/10W
R123	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R124	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R125	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R126	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R127	1-216-821-11	METAL CHIP	1K	5%	1/10W (GX570)

Ref. No.	Part No.	Description			Remark
R127	1-216-825-11	METAL CHIP	2.2K	5%	1/10W (GX470)
R128	1-216-821-11	METAL CHIP	1K	5%	1/10W (GX570)
R128	1-216-825-11	METAL CHIP	2.2K	5%	1/10W (GX470)
R129	1-216-853-11	METAL CHIP	470K	5%	1/10W (GX470)
R130	1-216-853-11	METAL CHIP	470K	5%	1/10W (GX470)
R131	1-216-809-11	METAL CHIP	100	5%	1/10W
R132	1-216-809-11	METAL CHIP	100	5%	1/10W
R135	1-216-833-11	METAL CHIP	10K	5%	1/10W
R136	1-216-833-11	METAL CHIP	10K	5%	1/10W
R137	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R138	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R139	1-216-821-11	METAL CHIP	1K	5%	1/10W
R140	1-216-821-11	METAL CHIP	1K	5%	1/10W
R141	1-216-837-11	METAL CHIP	22K	5%	1/10W
R142	1-216-837-11	METAL CHIP	22K	5%	1/10W
R143	1-216-813-11	METAL CHIP	220	5%	1/10W
R144	1-216-813-11	METAL CHIP	220	5%	1/10W
R145	1-216-841-11	METAL CHIP	47K	5%	1/10W
R147	1-216-841-11	METAL CHIP	47K	5%	1/10W
R148	1-216-841-11	METAL CHIP	47K	5%	1/10W
R154	1-216-857-11	METAL CHIP	1M	5%	1/10W
R155	1-216-849-11	METAL CHIP	220K	5%	1/10W
R156	1-216-849-11	METAL CHIP	220K	5%	1/10W
R157	1-216-849-11	METAL CHIP	220K	5%	1/10W
R158	1-216-849-11	METAL CHIP	220K	5%	1/10W
R159	1-216-841-11	METAL CHIP	47K	5%	1/10W
R160	1-216-841-11	METAL CHIP	47K	5%	1/10W
R161	1-216-837-11	METAL CHIP	22K	5%	1/10W
R162	1-216-837-11	METAL CHIP	22K	5%	1/10W
R163	1-216-841-11	METAL CHIP	47K	5%	1/10W
R164	1-216-841-11	METAL CHIP	47K	5%	1/10W
R165	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R166	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R167	1-216-821-11	METAL CHIP	1K	5%	1/10W
R168	1-216-821-11	METAL CHIP	1K	5%	1/10W
R171	1-216-864-11	SHORT CHIP	0 (GX470)		
R172	1-216-864-11	SHORT CHIP	0 (GX470)		
R175	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R176	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R177	1-216-864-11	SHORT CHIP	0		
R178	1-216-864-11	SHORT CHIP	0		
R201	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R202	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R250	1-216-829-11	METAL CHIP	4.7K	5%	1/10W (GX470)
R250	1-216-833-11	METAL CHIP	10K	5%	1/10W (GX570)
R251	1-216-817-11	METAL CHIP	470	5%	1/10W
R252	1-216-817-11	METAL CHIP	470	5%	1/10W
R253	1-216-829-11	METAL CHIP	4.7K	5%	1/10W (GX470)
R253	1-216-833-11	METAL CHIP	10K	5%	1/10W (GX570)
R254	1-216-826-11	METAL CHIP	2.7K	5%	1/10W (GX470)
R254	1-216-829-11	METAL CHIP	4.7K	5%	1/10W (GX570)
R257	1-216-826-11	METAL CHIP	2.7K	5%	1/10W (GX470)
R257	1-216-829-11	METAL CHIP	4.7K	5%	1/10W (GX570)
R261	1-216-833-11	METAL CHIP	10K	5%	1/10W
R262	1-216-833-11	METAL CHIP	10K	5%	1/10W
R263	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R264	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R265	1-216-809-11	METAL CHIP	100	5%	1/10W
R267	1-216-841-11	METAL CHIP	47K	5%	1/10W
R268	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R269	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R271	1-216-864-11	SHORT CHIP	0		
R272	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R274	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R276	1-216-833-11	METAL CHIP	10K	5%	1/10W
R277	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R279	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R280	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R281	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R283	1-216-833-11	METAL CHIP	10K	5%	1/10W
R285	1-216-833-11	METAL CHIP	10K	5%	1/10W
R286	1-216-837-11	METAL CHIP	22K	5%	1/10W
R287	1-216-853-11	METAL CHIP	470K	5%	1/10W
R289	1-216-845-11	METAL CHIP	100K	5%	1/10W
R290	1-216-821-11	METAL CHIP	1K	5%	1/10W
R291	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R292	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R301	1-216-809-11	METAL CHIP	100	5%	1/10W (GX570)
R302	1-216-809-11	METAL CHIP	100	5%	1/10W (GX570)
R304	1-216-853-11	METAL CHIP	470K	5%	1/10W (GX570)
R305	1-216-825-11	METAL CHIP	2.2K	5%	1/10W (GX570)
R306	1-216-825-11	METAL CHIP	2.2K	5%	1/10W (GX570)
R307	1-216-841-11	METAL CHIP	47K	5%	1/10W (GX570)
R308	1-216-829-11	METAL CHIP	4.7K	5%	1/10W (GX570)
R309	1-216-833-11	METAL CHIP	10K	5%	1/10W (GX570)
R310	1-216-817-11	METAL CHIP	470	5%	1/10W (GX570)
R311	1-216-864-11	SHORT CHIP	0 (GX570)		
R312	1-216-864-11	SHORT CHIP	0 (GX570)		
R313	1-216-864-11	SHORT CHIP	0 (GX570)		
R314	1-216-864-11	SHORT CHIP	0 (GX570)		
R315	1-216-809-11	METAL CHIP	100	5%	1/10W
R316	1-216-809-11	METAL CHIP	100	5%	1/10W
R317	1-216-809-11	METAL CHIP	100	5%	1/10W
R318	1-216-809-11	METAL CHIP	100	5%	1/10W
R319	1-216-809-11	METAL CHIP	100	5%	1/10W
R321	1-216-809-11	METAL CHIP	100	5%	1/10W

MAIN

Ref. No.	Part No.	Description			Remark
R322	1-216-809-11	METAL CHIP	100	5%	1/10W
R323	1-216-809-11	METAL CHIP	100	5%	1/10W
R324	1-216-809-11	METAL CHIP	100	5%	1/10W
R325	1-216-829-11	METAL CHIP	4.7K	5%	1/10W (GX570)
R325	1-216-837-11	METAL CHIP	22K	5%	1/10W (GX470)
R326	1-216-829-11	METAL CHIP	4.7K	5%	1/10W (GX570)
R326	1-216-837-11	METAL CHIP	22K	5%	1/10W (GX470)
R327	1-216-837-11	METAL CHIP	22K	5%	1/10W (GX570)
R328	1-216-837-11	METAL CHIP	22K	5%	1/10W (GX570)
R341	1-216-833-11	METAL CHIP	10K	5%	1/10W
R342	1-216-821-11	METAL CHIP	1K	5%	1/10W
R343	1-216-837-11	METAL CHIP	22K	5%	1/10W
R344	1-216-837-11	METAL CHIP	22K	5%	1/10W
R345	1-216-833-11	METAL CHIP	10K	5%	1/10W
R346	1-216-821-11	METAL CHIP	1K	5%	1/10W
R347	1-216-837-11	METAL CHIP	22K	5%	1/10W
R348	1-216-837-11	METAL CHIP	22K	5%	1/10W
R349	1-216-833-11	METAL CHIP	10K	5%	1/10W
R350	1-216-837-11	METAL CHIP	22K	5%	1/10W
R351	1-216-837-11	METAL CHIP	22K	5%	1/10W
R352	1-216-857-11	METAL CHIP	1M	5%	1/10W
R353	1-216-833-11	METAL CHIP	10K	5%	1/10W
R354	1-216-837-11	METAL CHIP	22K	5%	1/10W (GX470)
R355	1-216-837-11	METAL CHIP	22K	5%	1/10W (GX470)
R356	1-216-833-11	METAL CHIP	10K	5%	1/10W (GX570)
R356	1-216-857-11	METAL CHIP	1M	5%	1/10W (GX470)
R357	1-216-864-11	SHORT CHIP	0 (GX570)		
R358	1-216-864-11	SHORT CHIP	0 (GX570)		
R359	1-216-864-11	SHORT CHIP	0 (GX570)		
R360	1-216-864-11	SHORT CHIP	0 (GX570)		
R363	1-216-864-11	SHORT CHIP	0		
R364	1-216-864-11	SHORT CHIP	0		
R365	1-216-864-11	SHORT CHIP	0		
R366	1-216-864-11	SHORT CHIP	0		
R381	1-216-821-11	METAL CHIP	1K	5%	1/10W
R382	1-216-821-11	METAL CHIP	1K	5%	1/10W
R383	1-216-821-11	METAL CHIP	1K	5%	1/10W
R901	1-216-845-11	METAL CHIP	100K	5%	1/10W
R902	1-216-864-11	SHORT CHIP	0		
R903	1-216-833-11	METAL CHIP	10K	5%	1/10W
R904	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R905	1-216-833-11	METAL CHIP	10K	5%	1/10W
R907	1-216-841-11	METAL CHIP	47K	5%	1/10W
R908	1-216-841-11	METAL CHIP	47K	5%	1/10W
R909	1-216-837-11	METAL CHIP	22K	5%	1/10W
R910	1-216-833-11	METAL CHIP	10K	5%	1/10W
R911	1-216-821-11	METAL CHIP	1K	5%	1/10W
R912	1-216-821-11	METAL CHIP	1K	5%	1/10W
R913	1-216-821-11	METAL CHIP	1K	5%	1/10W
R914	1-216-833-11	METAL CHIP	10K	5%	1/10W
R918	1-216-849-11	METAL CHIP	220K	5%	1/10W
R919	1-216-864-11	SHORT CHIP	0		
R920	1-216-853-11	METAL CHIP	470K	5%	1/10W
R921	1-216-809-11	METAL CHIP	100	5%	1/10W
R922	1-216-849-11	METAL CHIP	220K	5%	1/10W
R923	1-216-809-11	METAL CHIP	100	5%	1/10W
R924	1-216-809-11	METAL CHIP	100	5%	1/10W
R925	1-216-809-11	METAL CHIP	100	5%	1/10W (GX570)
R932	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R935	1-216-833-11	METAL CHIP	10K	5%	1/10W
R936	1-216-837-11	METAL CHIP	22K	5%	1/10W
R941	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R942	1-216-833-11	METAL CHIP	10K	5%	1/10W
R943	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R944	1-216-849-11	METAL CHIP	220K	5%	1/10W
R945	1-216-813-11	METAL CHIP	220	5%	1/10W
R946	1-216-864-11	SHORT CHIP	0		
R947	1-216-849-11	METAL CHIP	220K	5%	1/10W
R948	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R949	1-216-833-11	METAL CHIP	10K	5%	1/10W
R950	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R952	1-216-841-11	METAL CHIP	47K	5%	1/10W
R953	1-216-833-11	METAL CHIP	10K	5%	1/10W
R955	1-216-821-11	METAL CHIP	1K	5%	1/10W
R956	1-216-809-11	METAL CHIP	100	5%	1/10W
R957	1-216-809-11	METAL CHIP	100	5%	1/10W
R959	1-216-809-11	METAL CHIP	100	5%	1/10W
R961	1-216-809-11	METAL CHIP	100	5%	1/10W (GX570)
R963	1-216-809-11	METAL CHIP	100	5%	1/10W
R965	1-216-809-11	METAL CHIP	100	5%	1/10W
R967	1-216-809-11	METAL CHIP	100	5%	1/10W
R968	1-216-809-11	METAL CHIP	100	5%	1/10W (GX570)
R969	1-216-809-11	METAL CHIP	100	5%	1/10W
R970	1-216-809-11	METAL CHIP	100	5%	1/10W
R971	1-216-809-11	METAL CHIP	100	5%	1/10W
R972	1-216-809-11	METAL CHIP	100	5%	1/10W
R973	1-216-809-11	METAL CHIP	100	5%	1/10W
R974	1-216-809-11	METAL CHIP	100	5%	1/10W
R975	1-216-809-11	METAL CHIP	100	5%	1/10W
R976	1-216-809-11	METAL CHIP	100	5%	1/10W
R977	1-216-809-11	METAL CHIP	100	5%	1/10W (GX570)
R978	1-216-809-11	METAL CHIP	100	5%	1/10W (GX570)
R979	1-216-809-11	METAL CHIP	100	5%	1/10W
R980	1-216-809-11	METAL CHIP	100	5%	1/10W
R981	1-216-809-11	METAL CHIP	100	5%	1/10W
R982	1-216-817-11	METAL CHIP	470	5%	1/10W
R996	1-216-809-11	METAL CHIP	100	5%	1/10W
R997	1-216-809-11	METAL CHIP	100	5%	1/10W
R999	1-216-809-11	METAL CHIP	100	5%	1/10W

Ref. No.	Part No.	Description			Remark
		< VIBRATOR >			
X901	1-579-463-11	VIBRATOR, CRYSTAL (32.768kHz)			
X902	1-795-482-11	VIBRATOR, CERAMIC (16MHz)			
**********					
	A-1159-739-A	MIC. AUX. HP BOARD, COMPLETE			
		**********			
		< CAPACITOR >			
C781	1-162-966-11	CERAMIC CHIP	0.0022uF	10%	50V
C782	1-162-966-11	CERAMIC CHIP	0.0022uF	10%	50V
C783	1-165-621-11	CERAMIC CHIP	0.1uF		50V
C784	1-165-621-11	CERAMIC CHIP	0.1uF		50V
C820	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V
C821	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V
		< EARTH TERMINAL >			
* EP701	1-537-738-21	TERMINAL, EARTH			
		< JACK >			
J701	1-794-702-11	JACK, HEADPHONE (PHONES)			
J702	1-794-702-11	JACK, HEADPHONE (AUDIO IN)			
		< RESISTOR >			
R823	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R824	1-216-837-11	METAL CHIP	22K	5%	1/10W
R825	1-216-821-11	METAL CHIP	1K	5%	1/10W
R826	1-216-821-11	METAL CHIP	1K	5%	1/10W
R827	1-216-833-11	METAL CHIP	10K	5%	1/10W
R831	1-216-853-11	METAL CHIP	470K	5%	1/10W
R832	1-216-853-11	METAL CHIP	470K	5%	1/10W
**********					
	1-687-133-12	MOTOR (LD) BOARD			
		**********			
**********					
	1-687-134-12	MOTOR (TB) BOARD			
		**********			
		< CONNECTOR >			
CN742	1-784-727-11	CONNECTOR, FFC 5P			
**********					
	A-1163-173-A	PANEL BOARD, COMPLETE			
		**********			
	2-658-282-01	GUIDE, FL			
		< CAPACITOR >			
C621	1-126-961-11	ELECT	2.2uF	20%	50V
C622	1-126-961-11	ELECT	2.2uF	20%	50V
C625	1-128-131-11	ELECT	22uF	20%	50V
C631	1-126-947-11	ELECT	47uF	20%	35V
C641	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C642	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C701	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C702	1-126-947-11	ELECT	47uF	20%	35V

Ref. No.	Part No.	Description			Remark
C703	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C704	1-162-962-11	CERAMIC CHIP	470PF	10%	50V
C705	1-162-962-11	CERAMIC CHIP	470PF	10%	50V
C707	1-162-968-11	CERAMIC CHIP	0.0047uF	10%	50V
C708	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C709	1-126-947-11	ELECT	47uF	20%	35V
C710	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C711	1-165-621-11	CERAMIC CHIP	0.1uF		50V
C712	1-126-965-11	ELECT	22uF	20%	50V
		< CONNECTOR >			
CN601	1-784-780-11	CONNECTOR, FFC 19P			
		< DIODE >			
D711	8-719-000-07	DIODE MC2836			
		< FLUORESCENT INDICATOR >			
FL701	1-519-871-11	INDICATOR TUBE, FLUORESCENT			
		< IC >			
IC610	6-600-446-01	IC RPM7240-H18			
IC701	6-806-287-01	IC uPD780232GC-509-8BT-A			
		< JUMPER RESISTOR >			
JR602	1-216-864-11	SHORT CHIP	0		
JR603	1-216-864-11	SHORT CHIP	0		
JR604	1-216-864-11	SHORT CHIP	0		
JR605	1-216-864-11	SHORT CHIP	0		
JR606	1-216-864-11	SHORT CHIP	0		
JR607	1-216-864-11	SHORT CHIP	0		
JR608	1-216-864-11	SHORT CHIP	0		
JR609	1-216-864-11	SHORT CHIP	0		
JR610	1-216-864-11	SHORT CHIP	0		
JR611	1-216-864-11	SHORT CHIP	0		
JR612	1-216-864-11	SHORT CHIP	0		
JR613	1-216-864-11	SHORT CHIP	0		
JR614	1-216-864-11	SHORT CHIP	0		
		< TRANSISTOR >			
Q621	8-729-120-28	TRANSISTOR	2SC1623-L5L6		
Q701	6-551-276-01	TRANSISTOR	RT1N431C-TP-1		
Q702	6-551-276-01	TRANSISTOR	RT1N431C-TP-1		
Q703	6-551-276-01	TRANSISTOR	RT1N431C-TP-1		
Q704	8-729-040-76	TRANSISTOR	KTA1273-Y-AT		
Q705	8-729-037-13	TRANSISTOR	KTA1271Y		
Q706	8-729-037-13	TRANSISTOR	KTA1271Y		
		< RESISTOR >			
R607	1-216-833-11	METAL CHIP	10K	5%	1/10W
R608	1-216-833-11	METAL CHIP	10K	5%	1/10W
R609	1-216-809-11	METAL CHIP	100	5%	1/10W
R610	1-216-845-11	METAL CHIP	100K	5%	1/10W
R617	1-216-833-11	METAL CHIP	10K	5%	1/10W
R618	1-216-833-11	METAL CHIP	10K	5%	1/10W
R627	1-216-809-11	METAL CHIP	100	5%	1/10W
R628	1-216-805-11	METAL CHIP	47	5%	1/10W

PANEL **POWER**

Ref. No.	Part No.	Description			Remark
R629	1-216-809-11	METAL CHIP	100	5%	1/10W
R647	1-216-833-11	METAL CHIP	10K	5%	1/10W
R650	1-216-837-11	METAL CHIP	22K	5%	1/10W
R651	1-216-841-11	METAL CHIP	47K	5%	1/10W
R660	1-216-837-11	METAL CHIP	22K	5%	1/10W
R661	1-216-841-11	METAL CHIP	47K	5%	1/10W
R662	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R663	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R670	1-216-837-11	METAL CHIP	22K	5%	1/10W
R671	1-216-841-11	METAL CHIP	47K	5%	1/10W
R672	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R673	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R674	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R680	1-216-837-11	METAL CHIP	22K	5%	1/10W
R681	1-216-841-11	METAL CHIP	47K	5%	1/10W
R690	1-216-833-11	METAL CHIP	10K	5%	1/10W
R701	1-216-864-11	SHORT CHIP	0		
R702	1-216-813-11	METAL CHIP	220	5%	1/10W
R703	1-216-809-11	METAL CHIP	100	5%	1/10W
R704	1-216-864-11	SHORT CHIP	0		
R705	1-216-809-11	METAL CHIP	100	5%	1/10W
R706	1-216-809-11	METAL CHIP	100	5%	1/10W
R707	1-216-809-11	METAL CHIP	100	5%	1/10W
R708	1-216-809-11	METAL CHIP	100	5%	1/10W
R709	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R710	1-216-821-11	METAL CHIP	1K	5%	1/10W
R711	1-216-821-11	METAL CHIP	1K	5%	1/10W
R712	1-216-821-11	METAL CHIP	1K	5%	1/10W
R713	1-216-864-11	SHORT CHIP	0		
R715	1-216-809-11	METAL CHIP	100	5%	1/10W
R716	1-216-809-11	METAL CHIP	100	5%	1/10W
R717	1-216-809-11	METAL CHIP	100	5%	1/10W
R718	1-216-809-11	METAL CHIP	100	5%	1/10W
R719	1-216-809-11	METAL CHIP	100	5%	1/10W
R741	1-216-801-11	METAL CHIP	22	5%	1/10W
R742	1-216-801-11	METAL CHIP	22	5%	1/10W
R743	1-216-837-11	METAL CHIP	22K	5%	1/10W
R744	1-216-837-11	METAL CHIP	22K	5%	1/10W
R745	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R746	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R762	1-216-841-11	METAL CHIP	47K	5%	1/10W
R763	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R764	1-216-841-11	METAL CHIP	47K	5%	1/10W
R765	1-216-841-11	METAL CHIP	47K	5%	1/10W
R766	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R771	1-216-821-11	METAL CHIP	1K	5%	1/10W
R772	1-216-833-11	METAL CHIP	10K	5%	1/10W
R773	1-216-821-11	METAL CHIP	1K	5%	1/10W
R774	1-216-833-11	METAL CHIP	10K	5%	1/10W
R775	1-216-821-11	METAL CHIP	1K	5%	1/10W
R776	1-216-833-11	METAL CHIP	10K	5%	1/10W
		< SWITCH >			
S611	1-762-875-21	SWITCH, KEYBOARD (▷▷, SELECT FOLDER +) (GX470)			
S611	1-762-875-21	SWITCH, KEYBOARD (▷▷, SELECT FOLDER +, CATEGORY +) (GX570)			
S612	1-762-875-21	SWITCH, KEYBOARD (▷▷⏸, TUNING +)			
S613	1-762-875-21	SWITCH, KEYBOARD (▷⏸)			
S621	1-762-875-21	SWITCH, KEYBOARD (◁◁, SELECT FOLDER –) (GX470)			
S621	1-762-875-21	SWITCH, KEYBOARD (◁◁, SELECT FOLDER –, CATEGORY –) (GX570)			
S622	1-762-875-21	SWITCH, KEYBOARD (⏮◁◁, TUNING –)			
S623	1-762-875-21	SWITCH, KEYBOARD (□)			
S671	1-479-670-11	ENCODER, ROTARY (VOLUME)			
		< VIBRATOR >			
X701	1-795-054-21	VIBRATOR, CERAMIC (4.19MHz)			
**********					
	A-1163-222-A	POWER BOARD, COMPLETE (GX570)			
	A-1163-223-A	POWER BOARD, COMPLETE (GX470)			
		**********			
	7-685-872-01	SCREW +BVTT 3X8 (S)			
		< CAPACITOR >			
C403	1-137-749-11	MYLAR	0.1uF		100V
C404	1-137-749-11	MYLAR	0.1uF		100V
C405	1-137-847-21	ELECT	2200uF	20%	71V (GX570)
C406	1-137-847-21	ELECT	2200uF	20%	71V (GX570)
C411	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C441	1-126-964-11	ELECT	10uF	20%	50V
C442	1-126-964-11	ELECT	10uF	20%	50V
C443	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V
C444	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V
C445	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
C446	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
C447	1-126-965-11	ELECT	22uF	20%	50V
C448	1-126-965-11	ELECT	22uF	20%	50V
C451	1-136-165-00	FILM	0.1uF	5%	50V
C452	1-136-165-00	FILM	0.1uF	5%	50V
C453	1-136-165-00	FILM	0.1uF	5%	50V
C454	1-136-165-00	FILM	0.1uF	5%	50V
C481	1-104-665-11	ELECT	100uF	20%	25V
C486	1-126-961-11	ELECT	2.2uF	20%	50V
C488	1-126-965-11	ELECT	22uF	20%	50V
C489	1-128-552-51	ELECT	47uF	20%	63V (GX470)
C489	1-128-562-11	ELECT	47uF	20%	100V (GX570)
C490	1-128-563-11	ELECT	100uF	20%	100V (GX570)
C490	1-128-576-11	ELECT	100uF	20%	63V (GX470)
		< CONNECTOR >			
* CN441	1-573-087-11	PIN, CONNECTOR 13P			
		< DIODE >			
D401	6-501-234-01	DIODE GBJ10DB9			
D441	8-719-000-07	DIODE MC2836			
D443	8-719-988-61	DIODE 1SS355TE-17			
D481	8-719-988-61	DIODE 1SS355TE-17			
D483	8-719-988-61	DIODE 1SS355TE-17			

Ref. No.	Part No.	Description			Remark
		< IC >			
IC441	6-600-221-01	IC STK403-130-E			
		< JACK >			
JK441	1-694-785-11	TERMINAL BOARD (SPEAKER)			
		< COIL >			
L441	1-422-009-13	COIL, AIR-CORE			
L442	1-422-009-13	COIL, AIR-CORE			
		< TRANSISTOR >			
Q441	6-551-268-01	TRANSISTOR	2SC5625		
Q442	6-551-268-01	TRANSISTOR	2SC5625		
Q481	8-729-120-28	TRANSISTOR	2SC1623-L5L6		
Q482	8-729-120-28	TRANSISTOR	2SC1623-L5L6		
Q483	8-729-120-28	TRANSISTOR	2SC1623-L5L6		
Q484	8-729-120-28	TRANSISTOR	2SC1623-L5L6		
Q485	8-729-600-22	TRANSISTOR	2SA1235-F		
Q486	8-729-120-28	TRANSISTOR	2SC1623-L5L6		
Q487	8-729-120-28	TRANSISTOR	2SC1623-L5L6		
Q488	8-729-901-87	TRANSISTOR	2SC2411K-CQ		
Q489	6-551-268-01	TRANSISTOR	2SC5625		
		< RESISTOR >			
R401	1-216-845-11	METAL CHIP	100K	5%	1/10W
R402	1-216-845-11	METAL CHIP	100K	5%	1/10W
R407	1-216-809-11	METAL CHIP	100	5%	1/10W
R411	1-216-797-11	METAL CHIP	10	5%	1/10W
R412	1-216-797-11	METAL CHIP	10	5%	1/10W
R413	1-216-797-11	METAL CHIP	10	5%	1/10W
R414	1-216-797-11	METAL CHIP	10	5%	1/10W
R415	1-216-797-11	METAL CHIP	10	5%	1/10W
R416	1-216-797-11	METAL CHIP	10	5%	1/10W
R417	1-216-809-11	METAL CHIP	100	5%	1/10W
R418	1-216-809-11	METAL CHIP	100	5%	1/10W
R419	1-216-809-11	METAL CHIP	100	5%	1/10W
R420	1-216-797-11	METAL CHIP	10	5%	1/10W
R421	1-216-797-11	METAL CHIP	10	5%	1/10W
R422	1-216-797-11	METAL CHIP	10	5%	1/10W
R423	1-216-797-11	METAL CHIP	10	5%	1/10W
R424	1-216-797-11	METAL CHIP	10	5%	1/10W
R425	1-216-797-11	METAL CHIP	10	5%	1/10W
R434	1-216-864-11	SHORT CHIP	0		
R435	1-216-864-11	SHORT CHIP	0		
R440	1-216-837-11	METAL CHIP	22K	5%	1/10W
R441	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R442	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R443	1-216-841-11	METAL CHIP	47K	5%	1/10W
R444	1-216-841-11	METAL CHIP	47K	5%	1/10W
R445	1-216-821-11	METAL CHIP	1K	5%	1/10W
R446	1-216-821-11	METAL CHIP	1K	5%	1/10W
R447	1-216-841-11	METAL CHIP	47K	5%	1/10W
R448	1-216-841-11	METAL CHIP	47K	5%	1/10W
⚠R449	1-212-974-00	FUSIBLE	47	5%	1/2W F
⚠R451	1-220-893-11	METAL	0.22	10%	5W F

Ref. No.	Part No.	Description			Remark
⚠R452	1-220-893-11	METAL	0.22	10%	5W F
R453	1-216-797-11	METAL CHIP	10	5%	1/10W
R454	1-216-797-11	METAL CHIP	10	5%	1/10W
R455	1-216-821-11	METAL CHIP	1K	5%	1/10W
R456	1-216-821-11	METAL CHIP	1K	5%	1/10W
R457	1-216-837-11	METAL CHIP	22K	5%	1/10W
R458	1-216-837-11	METAL CHIP	22K	5%	1/10W
R459	1-216-841-11	METAL CHIP	47K	5%	1/10W
R460	1-216-841-11	METAL CHIP	47K	5%	1/10W
R461	1-216-797-11	METAL CHIP	10	5%	1/10W
R462	1-216-797-11	METAL CHIP	10	5%	1/10W
R465	1-216-841-11	METAL CHIP	47K	5%	1/10W
R466	1-216-845-11	METAL CHIP	100K	5%	1/10W
R480	1-216-845-11	METAL CHIP	100K	5%	1/10W
R481	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R482	1-216-833-11	METAL CHIP	10K	5%	1/10W
R483	1-216-801-11	METAL CHIP	22	5%	1/10W
R484	1-216-845-11	METAL CHIP	100K	5%	1/10W
R485	1-216-845-11	METAL CHIP	100K	5%	1/10W
R486	1-216-845-11	METAL CHIP	100K	5%	1/10W
R487	1-216-841-11	METAL CHIP	47K	5%	1/10W
R488	1-216-837-11	METAL CHIP	22K	5%	1/10W
R490	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R491	1-216-833-11	METAL CHIP	10K	5%	1/10W
R492	1-216-821-11	METAL CHIP	1K	5%	1/10W
R493	1-216-841-11	METAL CHIP	47K	5%	1/10W
⚠R495	1-202-972-61	FUSIBLE	1	5%	1/4W F
⚠R496	1-212-881-11	FUSIBLE	100	5%	1/4W F
R497	1-216-845-11	METAL CHIP	100K	5%	1/10W
R498	1-216-821-11	METAL CHIP	1K	5%	1/10W
R499	1-216-821-11	METAL CHIP	1K	5%	1/10W
		< RELAY >			
RY441	1-755-307-11	RELAY (GX470)			
RY441	1-755-308-11	RELAY (GX570)			
		< THERMISTOR >			
TH441	1-807-796-11	THERMISTOR			
**********					
	1-687-132-12	SENSOR BOARD			
		**********			
		< CONNECTOR >			
CN731	1-785-329-21	PIN, CONNECTOR (LIGHT ANGLE) 3P			
		< IC >			
IC731	6-600-022-01	IC RPI-576			
**********					
	A-1163-250-A	SUB WOOFER BOARD, COMPLETE (GX570)			
	A-1178-854-A	SUB WOOFER BOARD, COMPLETE (GX470)			
		**********			
		< CAPACITOR >			
C502	1-162-960-11	CERAMIC CHIP	220PF	10%	50V
C503	1-162-968-11	CERAMIC CHIP	0.0047uF	10%	50V
C504	1-104-662-91	ELECT	22uF	20%	25V

SUB WOOFER **SW** **SW-SP** **TRANSFOMER**

Ref. No.	Part No.	Description			Remark
C505	1-162-915-11	CERAMIC CHIP	10PF	0.5PF	50V
C506	1-104-665-11	ELECT	100uF	20%	25V
C507	1-126-967-11	ELECT	47uF	20%	50V
C508	1-164-230-11	CERAMIC CHIP	220PF	5%	50V
C509	1-128-563-11	ELECT	100uF	20%	100V
C510	1-128-582-11	ELECT	10uF	20%	100V
C511	1-128-582-11	ELECT	10uF	20%	100V
C512	1-136-497-81	FILM	0.1uF	5%	50V
C513	1-136-497-81	FILM	0.1uF	5%	50V
C514	1-126-948-11	ELECT	100uF	20%	35V
C516	1-126-964-11	ELECT	10uF	20%	50V
C517	1-126-964-11	ELECT	10uF	20%	50V
		< CONNECTOR >			
CN501	1-815-444-11	PIN, CONNECTOR (PWB) 3P			
CN502	1-819-134-11	PIN, CONNECTOR 6P			
CN503	1-819-132-11	PIN, CONNECTOR 4P			
		< DIODE >			
D501	6-501-176-01	DIODE UDZW-TE17-12B			
D502	8-719-988-61	DIODE 1SS355TE-17			
D503	8-719-988-61	DIODE 1SS355TE-17			
D504	8-719-988-61	DIODE 1SS355TE-17			
D507	8-719-988-61	DIODE 1SS355TE-17			
		< IC >			
IC501	6-600-091-01	IC STK404-130S			
		< JUMPER RESISTOR >			
JR501	1-216-864-11	SHORT CHIP	0		
JR502	1-216-864-11	SHORT CHIP	0		
		< TRANSISTOR >			
Q501	6-551-268-01	TRANSISTOR	2SC5625		
Q502	8-729-600-22	TRANSISTOR	2SA1235-F		
Q503	8-729-120-28	TRANSISTOR	2SC1623-L5L6		
Q505	8-729-120-28	TRANSISTOR	2SC1623-L5L6		
Q506	8-729-120-28	TRANSISTOR	2SC1623-L5L6		
Q507	8-729-120-28	TRANSISTOR	2SC1623-L5L6		
		< RESISTOR >			
R501	1-216-841-11	METAL CHIP	47K	5%	1/10W
R502	1-216-841-11	METAL CHIP	47K	5%	1/10W
R503	1-216-821-11	METAL CHIP	1K	5%	1/10W
R504	1-216-841-11	METAL CHIP	47K	5%	1/10W
⚠R505	1-215-873-00	METAL OXIDE	4.7K	5%	1W F (GX470)
⚠R505	1-215-896-00	METAL OXIDE	4.7K	5%	2W F (GX570)
⚠R506	1-202-972-61	FUSIBLE	1	5%	1/4W F
⚠R507	1-215-873-00	METAL OXIDE	4.7K	5%	1W F
⚠R508	1-215-873-00	METAL OXIDE	4.7K	5%	1W F
⚠R509	1-212-881-11	FUSIBLE	100	5%	1/4W F
⚠R510	1-220-893-11	METAL	0.22	10%	5W F
⚠R511	1-220-893-11	METAL	0.22	10%	5W F
R512	1-216-797-11	METAL CHIP	10	5%	1/10W
R513	1-216-821-11	METAL CHIP	1K	5%	1/10W
R514	1-216-837-11	METAL CHIP	22K	5%	1/10W

Ref. No.	Part No.	Description			Remark
R515	1-216-841-11	METAL CHIP	47K	5%	1/10W
R516	1-216-809-11	METAL CHIP	100	5%	1/10W
R517	1-216-833-11	METAL CHIP	10K	5%	1/10W
R518	1-216-833-11	METAL CHIP	10K	5%	1/10W
R520	1-216-845-11	METAL CHIP	100K	5%	1/10W
R521	1-216-809-11	METAL CHIP	100	5%	1/10W
R522	1-216-809-11	METAL CHIP	100	5%	1/10W
R523	1-216-809-11	METAL CHIP	100	5%	1/10W
R524	1-216-841-11	METAL CHIP	47K	5%	1/10W
R525	1-216-797-11	METAL CHIP	10	5%	1/10W
R526	1-216-797-11	METAL CHIP	10	5%	1/10W
R527	1-216-797-11	METAL CHIP	10	5%	1/10W
R529	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R530	1-216-837-11	METAL CHIP	22K	5%	1/10W
R531	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R532	1-216-837-11	METAL CHIP	22K	5%	1/10W
R533	1-216-837-11	METAL CHIP	22K	5%	1/10W
⚠R534	1-202-972-61	FUSIBLE	1	5%	1/4W F
		< RELAY >			
RY501	1-755-307-11	RELAY			
**********					
	1-687-669-12	SW BOARD			
		*********			
S751	1-786-514-31	SWITCH, LEVER (SLIDE) (DISC TABLE OPEN/CLOSE DETECT)			
**********					
		SW-SP BOARD			
		**********			
		< JACK >			
JK501	1-780-242-11	TERMINAL BOARD, PUSH (ANTENNA) 2P (SUB WOOFER OUT)			
**********					
	A-1163-241-A	TRANSFORMER BOARD, COMPLETE			
		**********			
	1-533-233-31	FUSE HOLDER			
		< CAPACITOR >			
C907	1-136-165-00	FILM	0.1uF	5%	50V
C908	1-128-553-11	ELECT	220uF	20%	63V
C909	1-126-964-11	ELECT	10uF	20%	50V
C910	1-126-968-11	ELECT	100uF	20%	50V
C911	1-126-942-61	ELECT	1000uF	20%	25V
		< CONNECTOR >			
* CN901	1-793-660-11	PIN, CONNECTOR (PC BOARD) 3P			
CN903	1-819-131-11	PIN, CONNECTOR 3P			
CN907	1-819-139-11	PIN, CONNECTOR 11P			
		< DIODE >			
D901	8-719-988-61	DIODE 1SS355TE-17			
D902	6-500-522-21	DIODE 10EDB40-TB3			
D903	6-500-522-21	DIODE 10EDB40-TB3			
D904	6-500-522-21	DIODE 10EDB40-TB3			

Ref. No.	Part No.	Description			Remark
D905	6-500-522-21	DIODE 10EDB40-TB3			
D906	6-501-184-01	DIODE UDZW-TE17-27B			
D908	6-500-522-21	DIODE 10EDB40-TB3			
D910	8-719-000-08	DIODE MC2838			
		< TRANSFORMER >			
⚠PT902	1-443-926-11	TRANSFORMER, POWER			
		< TRANSISTOR >			
Q902	8-729-048-66	TRANSISTOR	2SB1238-PQR-TV2		
		< RESISTOR >			
⚠R902	1-202-723-00	SOLID	2.2M	20%	1/2W F
R903	1-216-833-11	METAL CHIP	10K	5%	1/10W
R904	1-216-821-11	METAL CHIP	1K	5%	1/10W
⚠R908	1-202-972-61	FUSIBLE	1	5%	1/4W F
R910	1-216-801-11	METAL CHIP	22	5%	1/10W
R911	1-216-864-11	SHORT CHIP	0		
R914	1-216-833-11	METAL CHIP	10K	5%	1/10W
		< RELAY >			
⚠RY901	1-755-334-11	RELAY, AC POWER			
**********					
	A-1167-407-A	XM BOARD, COMPLETE (GX570)			
		**********			
		< CAPACITOR >			
C001	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C002	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C003	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C004	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C005	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C006	1-164-357-11	CERAMIC CHIP	0.001uF	5%	50V
C007	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C008	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C009	1-128-993-21	ELECT CHIP	22uF	20%	10V
C010	1-128-993-21	ELECT CHIP	22uF	20%	10V
C011	1-162-915-11	CERAMIC CHIP	10PF	0.5PF	50V
C012	1-162-915-11	CERAMIC CHIP	10PF	0.5PF	50V
C014	1-162-919-11	CERAMIC CHIP	22PF	5%	50V
C015	1-162-919-11	CERAMIC CHIP	22PF	5%	50V
C016	1-162-919-11	CERAMIC CHIP	22PF	5%	50V
C017	1-162-919-11	CERAMIC CHIP	22PF	5%	50V
C018	1-162-915-11	CERAMIC CHIP	10PF	0.5PF	50V
C019	1-162-915-11	CERAMIC CHIP	10PF	0.5PF	50V
C021	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C022	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C023	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C024	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C025	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C041	1-128-993-21	ELECT CHIP	22uF	20%	10V
C042	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C043	1-124-779-00	ELECT CHIP	10uF	20%	16V
C044	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C051	1-128-993-21	ELECT CHIP	22uF	20%	10V
C052	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C053	1-128-996-11	ELECT CHIP	4.7uF	20%	50V
C055	1-124-779-00	ELECT CHIP	10uF	20%	16V
C056	1-164-357-11	CERAMIC CHIP	0.001uF	5%	50V
C057	1-164-357-11	CERAMIC CHIP	0.001uF	5%	50V
C061	1-216-864-11	SHORT CHIP	0		
C062	1-107-726-91	CERAMIC CHIP	0.01uF	10%	16V
C063	1-107-726-91	CERAMIC CHIP	0.01uF	10%	16V
C064	1-107-726-91	CERAMIC CHIP	0.01uF	10%	16V
C065	1-124-779-00	ELECT CHIP	10uF	20%	16V
C066	1-164-357-11	CERAMIC CHIP	0.001uF	5%	50V
C067	1-164-357-11	CERAMIC CHIP	0.001uF	5%	50V
		< CONNECTOR >			
CN001	1-793-580-11	CONNECTOR, FFC (LIF (NON-Z1F)) 15P			
		< DIODE >			
D011	6-500-848-01	DIODE MC2840-T112-1			
D012	6-500-848-01	DIODE MC2840-T112-1			
		< JUMPER RESISTOR/FERRITE BEAD >			
FB001	1-216-295-00	SHORT CHIP	0		
FB002	1-216-295-00	SHORT CHIP	0		
FB021	1-216-295-00	SHORT CHIP	0		
FB022	1-216-295-00	SHORT CHIP	0		
FB041	1-414-813-11	FERRITE, EMI (SMD) (2012)			
		< IC >			
IC001	6-709-251-01	IC F2602E-01-TR			
IC041	6-708-476-01	IC AK4384ET-E2			
IC051	8-759-656-83	IC NJM4580MD- (TE2)			
		< CONNECTOR >			
J001	1-793-642-21	CONNECTOR (USB) (4P), SQUARE (XM)			
		< COIL >			
L001	1-469-523-91	INDUCTOR	2.2uH		
L002	1-469-523-91	INDUCTOR	2.2uH		
		< TRANSISTOR >			
Q001	8-729-027-43	TRANSISTOR	DTC114EKA-T146		
Q003	6-551-248-01	TRANSISTOR	NTJS3151PT1G		
		< RESISTOR >			
R001	1-216-845-11	METAL CHIP	100K	5%	1/10W
R002	1-216-845-11	METAL CHIP	100K	5%	1/10W
R003	1-216-845-11	METAL CHIP	100K	5%	1/10W
R004	1-216-845-11	METAL CHIP	100K	5%	1/10W
R005	1-216-845-11	METAL CHIP	100K	5%	1/10W
R006	1-216-845-11	METAL CHIP	100K	5%	1/10W
R007	1-216-833-11	METAL CHIP	10K	5%	1/10W
R008	1-216-821-11	METAL CHIP	1K	5%	1/10W
R009	1-216-821-11	METAL CHIP	1K	5%	1/10W
R010	1-216-809-11	METAL CHIP	100	5%	1/10W
R011	1-216-809-11	METAL CHIP	100	5%	1/10W
R012	1-216-845-11	METAL CHIP	100K	5%	1/10W
R014	1-216-809-11	METAL CHIP	100	5%	1/10W
R015	1-216-825-11	METAL CHIP	2.2K	5%	1/10W

XM

Ref. No.	Part No.	Description			Remark
R016	1-216-817-11	METAL CHIP	470	5%	1/10W
R017	1-216-809-11	METAL CHIP	100	5%	1/10W
R018	1-216-809-11	METAL CHIP	100	5%	1/10W
R019	1-216-809-11	METAL CHIP	100	5%	1/10W
R020	1-216-837-11	METAL CHIP	22K	5%	1/10W
R021	1-216-809-11	METAL CHIP	100	5%	1/10W
R022	1-216-809-11	METAL CHIP	100	5%	1/10W
R023	1-216-809-11	METAL CHIP	100	5%	1/10W
R024	1-216-809-11	METAL CHIP	100	5%	1/10W
R025	1-216-809-11	METAL CHIP	100	5%	1/10W
R026	1-216-809-11	METAL CHIP	100	5%	1/10W
R031	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R032	1-216-841-11	METAL CHIP	47K	5%	1/10W
R033	1-216-841-11	METAL CHIP	47K	5%	1/10W
R034	1-216-841-11	METAL CHIP	47K	5%	1/10W
R035	1-216-841-11	METAL CHIP	47K	5%	1/10W
R036	1-216-833-11	METAL CHIP	10K	5%	1/10W
R037	1-216-833-11	METAL CHIP	10K	5%	1/10W
R051	1-216-841-11	METAL CHIP	47K	5%	1/10W
R052	1-216-841-11	METAL CHIP	47K	5%	1/10W
R055	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R056	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R057	1-216-828-11	METAL CHIP	3.9K	5%	1/10W
R065	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R066	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R067	1-216-828-11	METAL CHIP	3.9K	5%	1/10W
		< VIBRATOR >			
X001	1-760-841-11	VIBRATOR, CRYSTAL (45.158MHz)			

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MISCELLANEOUS
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61	1-831-952-21	CABLE, FLEXIBLE FLAT (19 CORE)
62	1-831-779-21	CABLE, FLEXIBLE FLAT (11 CORE)
158	1-417-656-21	MECHA DECK (CWN42FF609)
168	1-831-772-21	CABLE, FLEXIBLE FLAT (9 CORE)
204	1-693-713-11	TUNER (FM/AM)
205	1-831-769-21	CABLE, FLEXIBLE FLAT (9 CORE)
206	1-831-786-21	CABLE, FLEXIBLE FLAT (13 CORE)
208	1-831-771-21	CABLE, FLEXIBLE FLAT (23 CORE)
212	1-832-848-21	WIRE (FLAT TYPE) (15 CORE) (GX570)
303	1-831-928-21	CABLE, FLEXIBLE FLAT (11 CORE)
⚠306	1-830-190-11	CORD, POWER
502	1-828-938-51	WIRE (FLAT TYPE) (5 CORE)
576	1-832-404-21	CABLE, FLEXIBLE FLAT (16 CORE)
⚠579	A-4735-357-A	OPTICAL PICK-UP BLOCK (KSM-213DHAP) (including spindle motor (M401), sled motor (M402))
580	1-471-035-21	MAGNET ASSY
⚠F904	1-533-949-33	FUSE, CYLINDRICAL (TIME LUG) (T8AL/250V)
⚠F905	1-533-949-33	FUSE, CYLINDRICAL (TIME LUG) (T8AL/250V)
⚠F906	1-532-465-33	FUSE (T3.15AL/250V)
⚠F907	1-532-465-33	FUSE (T3.15AL/250V)
M001	1-787-344-11	FAN, DC
M741	A-1108-965-A	MOTOR ASSY, TABLE
M751	A-1108-966-A	MOTOR ASSY, LOADING
⚠PT901	1-443-924-11	TRANSFORMER, POWER (GX470)
⚠PT901	1-443-925-11	TRANSFORMER, POWER (GX570)
S101	1-771-853-11	SWITCH, DETECTION (LIMIT)
S711	1-477-680-12	ENCODER, ROTARY (DISC TABLE ADDRESS DETECT)

MEMO

REVISION HISTORY

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Ver.	Date	Description of Revision
1.0	2006.03	New